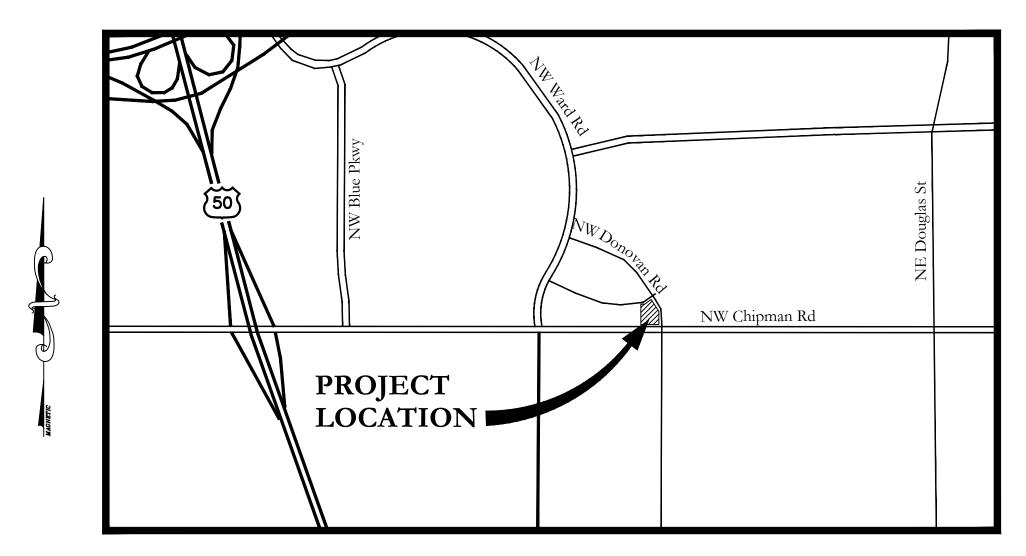
SUMMIT ORCHARDS - LOTS 4E-2A & 4E-2B

FINAL DEVELOPMENT PLANS

400 NW CHIPMAN ROAD LEE'S SUMMIT, JACKSON COUNTY, MISSOURI SEC. 31-48-31



LOCATION MAP

NOT TO SCALE

CONTACTS

ENGINEERING

Engineering Primary 781-Ronald L. Cowger, PE

(816) 781-3322

Engineering Alternate 781-4 Art Akin, PE

DEVELOPER
SUPERSTAR HOLDINGS, LLC
TIM HARRIS
244 W. MILL STREET, SUITE 101
LIBERTY, MISSOURI, 64068

STATUS

DATE:

2-17-23

FOR PERMIT
FOR CONSTRUCTION

ENGINEER'S CERTIFICATION:

SHEET LIST

SHEET TITLE

GRADING & EROSION CONTROL PLAN

GENERAL NOTES & LEGEND

GRADING PLAN - CUT & FILL

DRAINAGE AREA MAP & CALCS

SEE ADDITIONAL PLANS PREPARED BY OLSON ARCHITECTURAL

MCLAUGHLIN MUELLER INC HAS SOLE RESPONSIBILITY FOR SHEET

3A, HG CONSULT INC HAS SOLE RESPONSIBILITY FOR SHEET 3B, VSR DESIGN HAS SOLE RESPONSIBILITY FOR SHEET LS101

SPOT ELEVATION PLAN

PROPOSED MINOR PLAT

SITE PLAN

UTILITY PLAN

DETAILS DETAILS

DETAILS

UTILITY PROFILES

LANDSCAPE PLAN

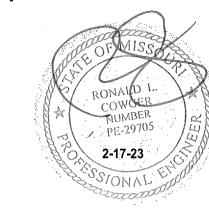
GROUP ARCHITECTS AND SCHARHAG ARCHITECTS.

SHEET

NUMBER

I hereby certify that this project has been designed, and these plans prepared, to meet or exceed the design criteria of City of Lee's Summit, Missouri, in current usage, except as indicated below.

I have not been retained to coordinate as-built drawings for this project.



Ronald L. Cowger, PE AGC Engineers, Inc.

LEGAL DESCRIPTION

LOTS 4E-2A & 4E-2B A REPLAT OF LOT 4E-2, SUMMIT ORCHARD, LOTS 4E-1 AND 4E-2 LEE'S SUMMIT, JACKSON COUNTY, MISSOURI

FLOOD NOTE

THIS PROPERTY DOES NOT LIE WITHIN A FLOOD ZONE AS SHOWN ON THE FLOOD INSURANCE RATE MAP 29095C0417G. DATED 1/20/2017

OIL AND GAS WELL NOTE

THERE WAS NO OIL OR GAS WELLS LOCATED ON PROPERTY PER MISSOURI DEPARTMENT OF NATURAL RESOURCES OIL AND GAS PERMITS WEBSITE.

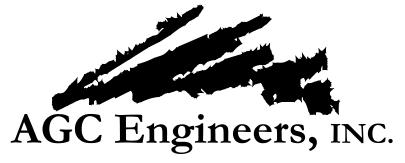
UTILITIES AND PUBLIC AGENCIES

CITY OF LEE'S SUMMIT PUBLIC WORKS	Dena Mezger	(816) 969-1800
WATER UTILITIES	Mark Schaufler	(816) 969-1900
ELECTRIC EVERGY	Ron Dejarnette	(816) 347-4316
GAS SPIRE	Brent Jones	(816) 399-9633
TELEPHONE AT&T	Marty Loper Mark Manion	(816) 275-1550 (816) 325-6516
CABLE COMCAST	Barbara Brown	(816) 795-2255



NOTE:

Contractor shall be responsible for determining the exact locations of all underground utilities or appurtenances prior to commencing construction. Existing underground utilities shown on the drawings are for reference only, and their accuracy and completeness are not guaranteed. Contractor shall be responsible for repair or replacement of all underground utilities damaged during construction.



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BY		REVISION	DATE
RC/ACA	FOR REVIEW		2-17-23

GENERAL PROJECT NOTES:

- 1. The Contractor shall, at a minimum, have the following document(s) at the job site at all times:
 - Signed approved plans,
 Contract Documents and Project Specifications,
 Standard Specifications (Kansas City Metro Chapter-APWA)
 All required permits
- 2. The Contractor shall reference the City of Lee's Summit Design Criteria, Standard Specifications, Standard Details, Approved Products Lists found at the following website
- https://cityofls.net/development-services/design/design-criteria/design-construction -manual-infrastructure
- 3. This Project shall be constructed in accordance with these Plans, City of Lee's Summit criteria and specifications (listed above), and their absence the Kansas City Metro Chapter of American Public Works Association (most current version)
- 4. All work required to complete the project and that is not specifically itemized in the Contractor's proposal shall be considered subsidiary to other work itemized in the proposal.
- 5. All materials and workmanship associated with this project shall be subject to inspection by the City of Lee's Summit and the Owner. The City and/or Owner reserves the right to accept or reject any such materials and workmanship that does not conform to the Standards and Technical Specifications.
- 6. RESERVED
- 7 The Contractor shall notify the Engineer immediately of any discrepancies in the
- 8. By use of these Plans the Contractor agrees that he shall be solely responsible for the safety and protection of the construction workers and the public.
- 9. Contractor is to obtain the necessary permits for all construction activities.
- 10. Contractor shall be responsible for determining the exact locations of all underground utilities or appurtenances prior to commencing construction. Existing underground utilities shown on the drawings are for reference only, and their accuracy and completeness are not guaranteed. Contractor shall be responsible for repair or replacement of all underground utilities damaged during construction.
- 11. RESERVED
- 12. It shall be the responsibility of the Contractor to control erosion and siltation during all phases of construction.
- 13. Any sidewalk, curb & gutter or pavement disturbed, damaged or destroyed during construction shall be replaced by Contractor at no additional cost to Owner.
- 14. Modified curb shall be used at all locations where pavement drains away from curb.
- 15. The Contractor shall contact the City's Development Service Engineering Inspectors 48 hours prior to any land disturbance work at (816) 969-1200.
- 16. Contractor shall be responsible to install pavement joints on all concrete pavement, slabs, and / or sidewalk. At a minimum, an expansion joint shall be provided along all interfaces of
 - 1. Building to sidewalk
 - 2. Building to concrete pavement
- 3. Sidewalk to concrete pavement Contractor shall submit a joint plan to the Engineer for review.

GRADING NOTES:

BY

RC/ACA | FOR REVIEW

- 1. Erosion protection shall be in place prior to any land disturbance.
- 2. Contours shown are to finished grade.
- 3. The construction area shall be cleared, grubbed, and stripped of topsoil and organic matter from all areas. Excess topsoil shall be stockpiled separately from compactable material. Stripping existing topsoil and organic matter shall be to a minimum depth of six (6) inches.
- 4. Areas to receive fill shall be striped of top soil and other organic material, scarified, and the top eight (8) inch depth compacted to 98% standard proctor density prior to the placement of any fill material. Any unsuitable areas shall be undercut and replaced with suitable material before any fill material can be placed.
- 5. Fill material shall be made in lifts not to exceed nine (9) inches depth compacted to 98% standard proctor density (per ASTM D-698) with a moisture content -3% and +2% optimum moisture. Contractor shall provide (at his/her sole cost) an independent geotechnical report certifying compaction at a sample interval of one (1) sample per 5000 square feet per lift or more frequent if required/recommended by the geotechnical firm. Geotechnical firm shall be approved by Owner prior to beginning fill operations. Fill material may include rock from on-site excavation if carefully placed so that large stones are well disturbed and voids are completely filled with smaller stones, earth, sand or gravel to furnish a solid embankment. No rock larger than three (3) inches in any dimension nor any shale shall be placed in the top 12 inches of embankment.
- 6. In all areas of excavation, if unsuitable soil conditions are encountered, a qualified Geotechnical engineer shall recommend to the Owner on the methods of undercutting and replacement of property compacted, approved fill material.

REVISION

7. All slopes are to be 3:1 or flatter unless otherwise indicated.

- 8. All slopes and areas disturbed by construction shall be graded smooth and a minimum four (4) inches of topsoil applied. If adequate topsoil is not available on-site, the Contractor shall provide topsoil, approved by the Owner, as needed. Any areas disturbed for any reason shall be corrected by the Contractor at no additional cost to the Owner prior to final acceptance of the project.
- All disturbed areas shall be seeded, fertilized and mulched or sodded in accordance with the standards and specifications adopted by the reviewing governing agency and good engineering practices

EROSION CONTROL NOTES:

- 1. Control of sediment is a very dynamic (ever changing) process. These plans are provided as a basis of anticipated erosion control measures. The Contractor shall modified add or delete with the Owner's permission the erosion control measure shown to prevent the migration of sediment off of the Owner's property and/or into jurisdictional waters/waterways.
- 2. Any sediment deposited on public streets shall be removed immediately by Contractor at his sole expense.
- 3. Stockpile excavation materials away from existing channels and grade to drain to adequate erosion control measures.
- 4. Remove silt build up in temporary sediment basins (if applicable), inlet protection devices and/or silt fence until site is completely stabilized. Verify grade prior to final seeding, lining or rip-rap installation.
- 5. All disturbed areas shall be seeded, fertilized and mulched, or sodded, in accordance with the Kansas City Metro Chapter of American Public Works Association. Seeding/Sodding shall be completed within 14 days after completing the work, in any area. If this is outside of the recommended seeding period, erosion control measures or other similarly effective measure shall remain and be maintained by Contractor until such time that the areas can be seeded and a stand of grass established per Missouri DNR or MoDOT Section 805.4 standards.
- 6. When sediment deposits reach approximately one-half the height of the BMP, the sediment shall be removed or a second BMP shall be installed. All costs associated with this work, including related incidents, shall be the Contractor's responsibility and shall be included in the bid for the proposed work.
- 7. Contractor shall perform BMP inspection once a week and after each rainfall event, and provide Owner a copy of report within 48 hrs. Faulty or inadequate erosion control measures shall be remediated or modified the same day of inspection so as to minimize the risk of sediment discharge from the Owner's property or jurisdictional waters/waterways.
- 8. Contractor shall protect and maintain erosion control measures until a complete stand of grass as defined by Missouri DNR has been established.
- 9. Concrete Washout Areas will be determined onsite by the Job Superintendent.
- 10. At a minimum the following permits/approvals shall be posted on site or as required by the permit terms and conditions:
 City of Lee's Summit Land Disturbance Permit.
- 11. Permanent fertilizing, seeding (Type "A") and mulch shall be in accordance with Kansas City Metro Chapter of American Public Works Association. Final acceptance per MoDOT Sections
- 12. The Contractor shall install Erosion Control Blanket (ECB) on all slopes with 3:1 slope or greater. ECB shall be Landlok CS2 or approved equal.
- 13. Provide temporary silt fencing at all pipe entrances until all site seeding and sodding has
- 14. Immediately remove sediments or other materials tracked onto public roadways.
- 15. Provide and maintain stabilized roadway construction entrance (or entrances as may be required).
- 16. Coordinate site grading with existing and proposed utilities.

been established. Maintain as necessary.

- 17. Stock pile waste excavation materials away from existing channels and grade to drain.
- 18. Remove silt build up in basin and verify grade prior to final seeding, lining or rip-rap installation and clean up.
- 19. All disturbed areas shall be seeded, fertilized and mulched, or sodded, in accordance with the Standards and Specifications adopted by the City of Lee's Summit, MoDOT, MoDNR or other governing agency and good engineering practices.
- 20. Silt fences, whether straw bales or filter fabric, require maintenance to preserve their effectiveness. All silt fences shall be inspected immediately after each heavy rainstorm and at least daily during prolonged rainfall. Any required repairs shall be made immediately. When sediment deposits reach approximately one-half the height of the silt fence, the sediment shall be removed or a second silt fence shall be installed. All costs associated with this work, including related incidentals, shall be the contractor's responsibility and shall be included in the bid for the proposed work.

WATER NOTES:

- 1. Reference MEP Plans to confirm fire protection main size, domestic water and meter sizes. If a discrepancy exists between the Plans contact the Engineer prior to ordering material.
- 2. Domestic water shall be 1-inch "k" copper conforming to the latest federal specifications or cross-linked polyethylene (PEX) meeting current City Code.
- 3. Minimum cover for water lines shall be 42 inches.

DATE

2-17-23

- 4. Install fittings as required. maximum pipe deflection per manufacturers recommendations.
- 5. Install 1-inch water meter at property line (on private property side).
- 6. All water service installation, including back-flow devices, are subject to field verification and approval by City inspector.

STORM NOTES:

1. All HDPE pipe shall be Water-Tight

- 2. All High Density Polyethylene (HDPE) pipe shall conform to AASHTO M294 Type S. Acceptable pipe must come from a Plastic Pipe Institute (PPI) certified manufacturer and have passed the PPI 3rd Party Certification testing. Each individual section of pipe shall be marked in accordance with AASHTO M294 and shall be affixed with the PPI Certification label. HDPE pipe shall be joined with water tight joints meeting the requirements of AASHTO M294 Paragraph 7.9.3.
- 3. Pipe lengths are from inside face to inside face.
- 4. End sections for HDPE pipe shall be metal with concrete toe wall unless noted otherwise.

ELECTRIC:

- 1. Contractor to coordinate with Evergy Electric for electrical service.
- 2. Contractor to coordinate with Evergy Electric for location of transformer pad and transformer if required.

GAS:

1. Contractor to coordinate with Spire for gas service, and location of meter.

TELEPHONE:

1. Site contractor to install PVC conduit(s) for use by telephone company. Site contractor to coordinate with telephone company for installation of service and location of proposed pedestals, etc. Telephone conduit shall have a minimum cover of 30". Site contractor shall coordinate location with telephone company representative and locate PVC crossings as necessary. See building plans for entrance locations.

REFERENCE DOCUMENTS & DRAWINGS:

Contractor shall reference the following documents prior to beginning Work

1. Architectural Plans (including but not limited to MEP and Structural Plans)

2. Landlord Work Order list from Superstar Holdings, LLC

EXISTING

FIRE HYDRANT

IRON BAR

MANHOLE

PP POWER POLE

SIGN

TREE

WATER METER

WATER VALVE

YARD LIGHT

-UGG- UNDERGROUND GAS

-UGP- UNDERGROUND POWER

-UGW- UNDERGROUND WATER

-OHP- OVERHEAD POWER

FINISH FLOOR ELEVATION

C DOWN GUY

SANITARY NOTES:

- 1. All sanitary stub lines shall be laid on 2.00% grade unless approved otherwise.
- 2. The Contractor shall install and properly maintain a mechanical plug at all connection points with existing lines until such time that the new line is tested
- 3. Where sanitary sewer lines are to be installed over and across water lines, a minimum of 24 inches of clearance shall be provided. Where clearance is not provided, construct sanitary sewer line of ductile iron pipe for a distance of at least 10 feet in each direction from crossing, with no joint within 6 feet of crossing.
- 4. Performance testing in accordance with APWA Section 2508. Witness and acceptance by City is required before placing in service.
- 5. All service lines shall be PVC (SDR 26) conforming to ASTM D 1764 and F1336 and having a cell classification of 12454B or 12364B as defined in ASTM D 1784 with Push-On joints.
- 6. All pre-cast manholes shall meet or exceed standards and specifications as set forth in ASTM C-478.
- 7. All PVC pipe shall meet or exceed standards and specifications as set forth in ASTM D-3034.
- 8. All proposed and existing street crossings shall be tamped granular backfill (Type 3) from the bottom of the trench to a point that is 15" below the finished grade of the street. All existing street crossings shall be filled with flowable fill per detail STR-011.
- 9. Mandrel testing is required and shall be performed in accordance with APWA 2508.5, at a minimum of 30 days after installation.
- 10. All inspection of sanitary sewer construction shall be performed by the City of Lee's Summit.
- 11. It is the responsibility of the contractor to have sanitary sewer lines air tested and sanitary sewer manholes vacuum tested for new construction and modifications to existing. Contractor shall provide city with test results upon completion of construction.
- 12. Areas with less than three (3) feet of depth from existing grade to proposed top of pipe shall be filled to an elevation of three (3) feet above the proposed top of pipe, compacted to 95% density +/-2% prior to trenching or laying of any pipe.
- 13. Sanitary sewer piping material shall be as follows:

0 to 15' depth; SDR-35 PVC 15' to 22' depth; SDR-26 PVC 22' to 30' depth; SDR-21 PVC greater than 30' depth; D.I.P.

6" service laterals; SDR-35 PVC at 2.0% minimum.14. All manholes, catch basins, utility valves, and meter pits shall be adjusted or

with prior City approval and City observation of installation.

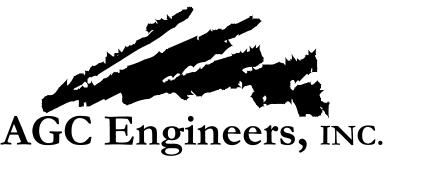
- rebuilt to grade as required.

 15. Service lines shall be extended a minimum of 1 foot past the house side of all
- utility easements.

 16. Insert Tee's or Saddles for service lines are not allowed except in special cases

LEGEND

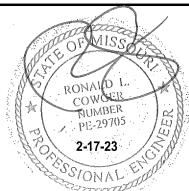
PROPOSED SANITARY STRUCTURE DRAINAGE EASEMENT GAS METER SANITARY SEWER WATER METER E/E ELECTRIC EASEMENT U/E UTILITY EASEMENT STORM STRUCTURE B/L BUILDING LINE SETBACK MANHOLF STORM SEWER RADIUS OR RAMP (as it relates to sidewalks) LANDING (as it relates to sidewalks) S/W or SW SIDEWALK WATERLINE AIR CONDITIONER MEP MECHANICAL, ELECTRICAL & PLUMBING WATER METER WATER SERVICES DEPARTMENT D.S. DOWN SPOUT TOP OF CURB WATER VALVE GROUND PAVEMENT LOW POINT GAS LINE HIGH POINT CLEANOUT CONTOUR LIGHT POLE (SITE PARKING)



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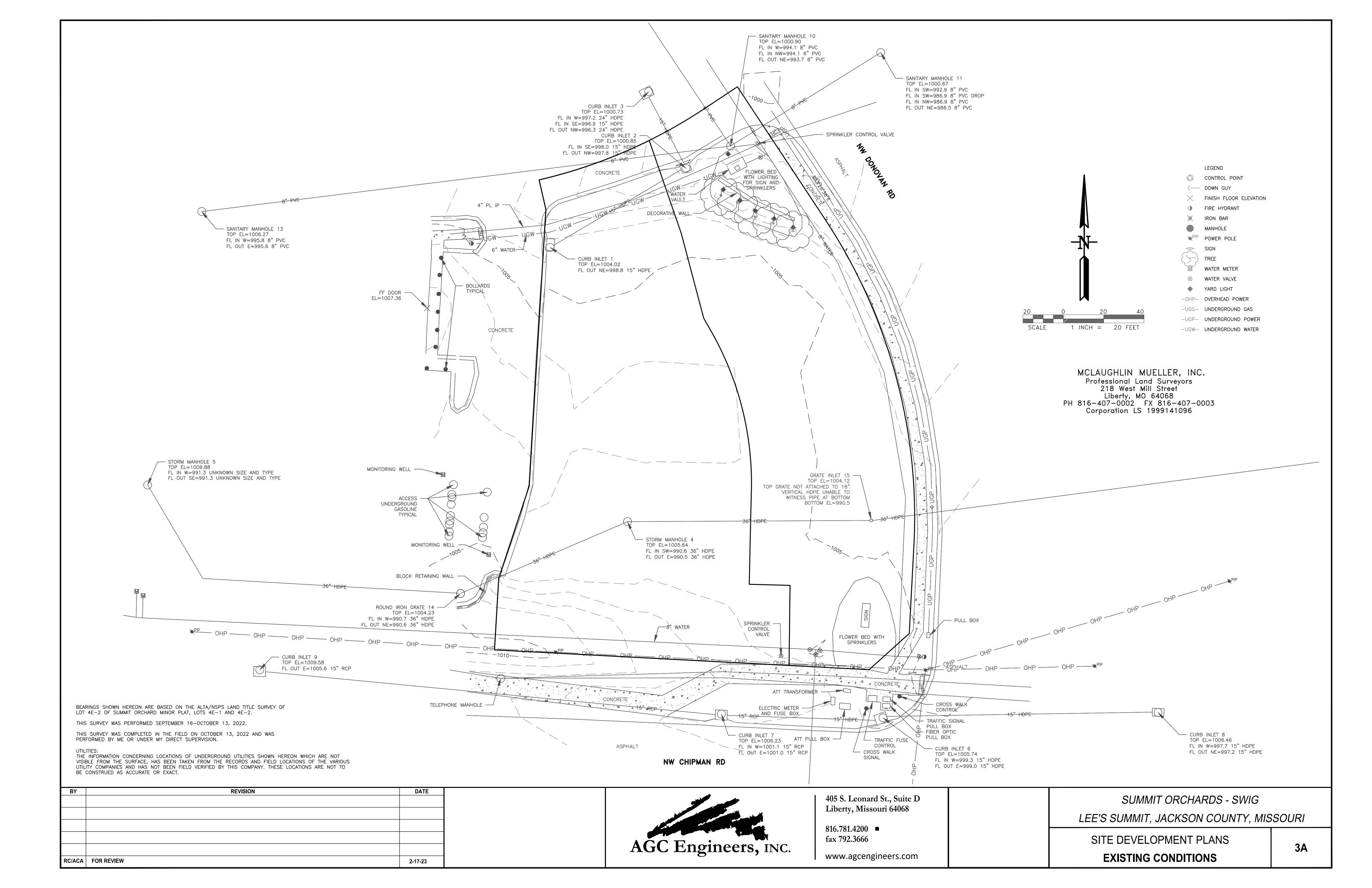
www.agcengineers.com

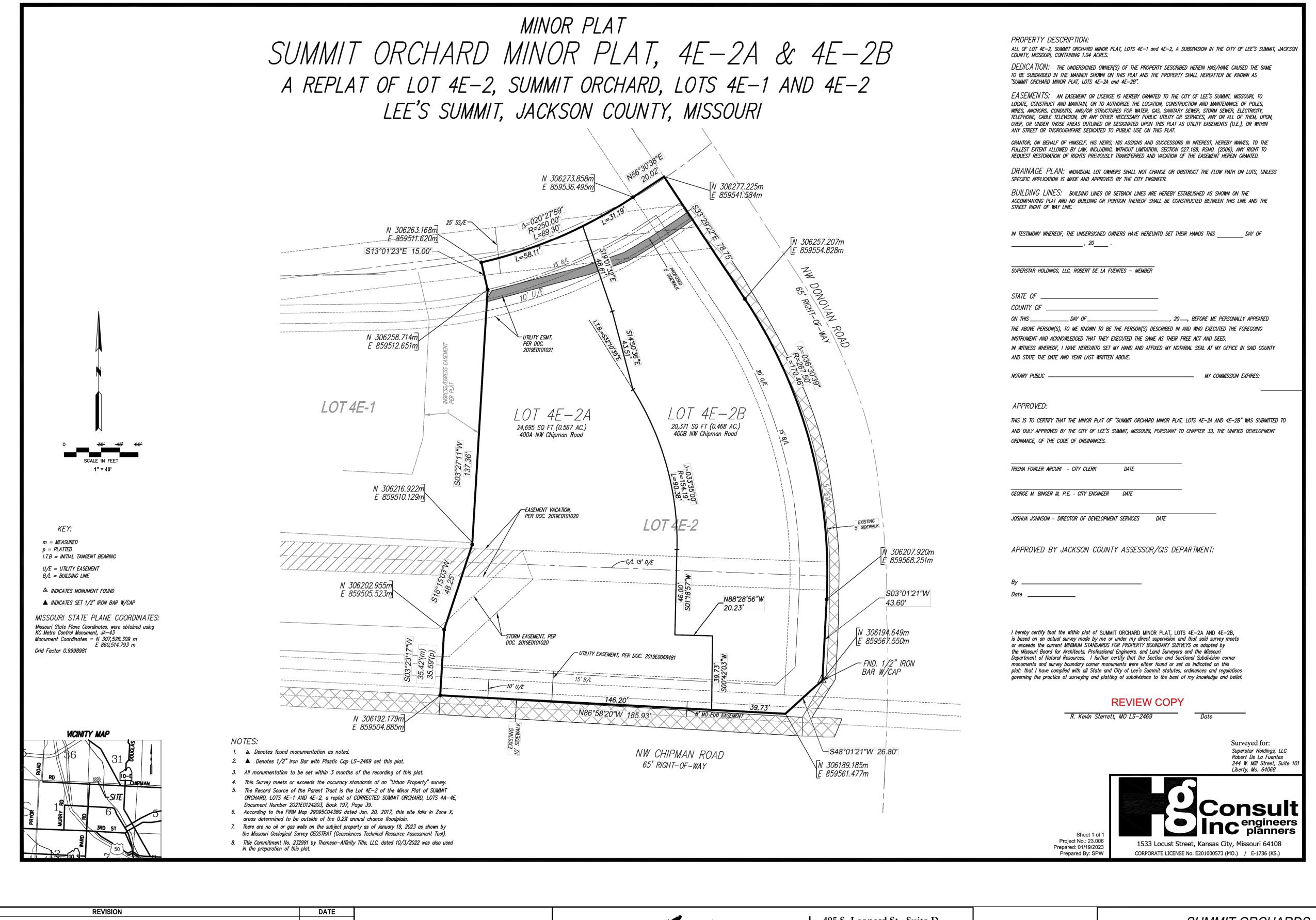


SUMMIT ORCHARDS - SWIG LEE'S SUMMIT, JACKSON COUNTY, MISSOURI

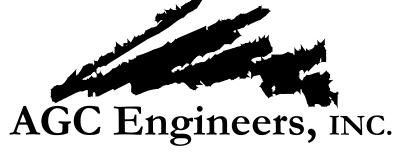
SITE DEVELOPMENT PLANS

GENERAL NOTES & LEGEND





BY	REVISION	DATE
RC/ACA	FOR REVIEW	2-17-23



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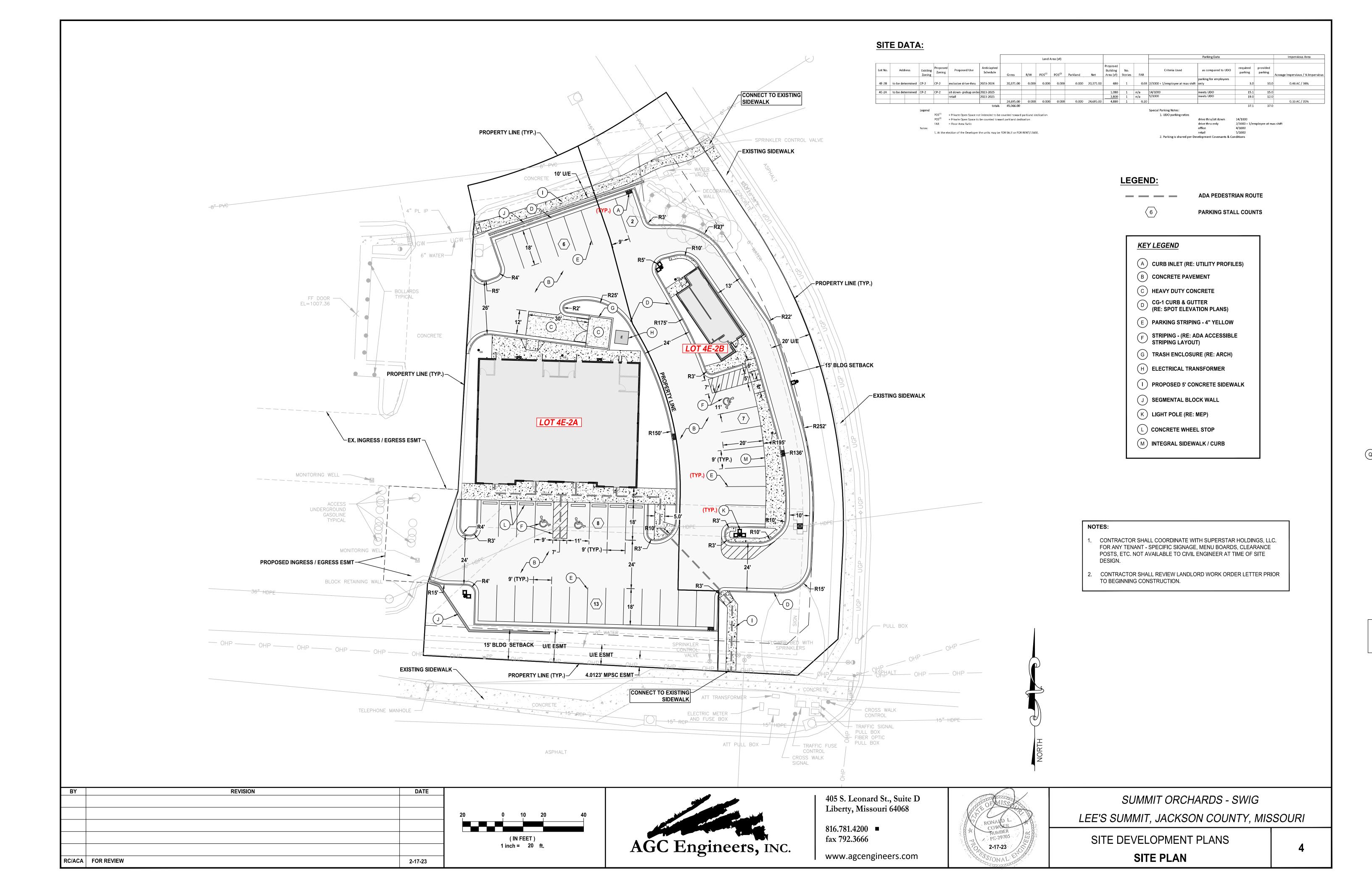
816.781.4200 **a** fax 792.3666

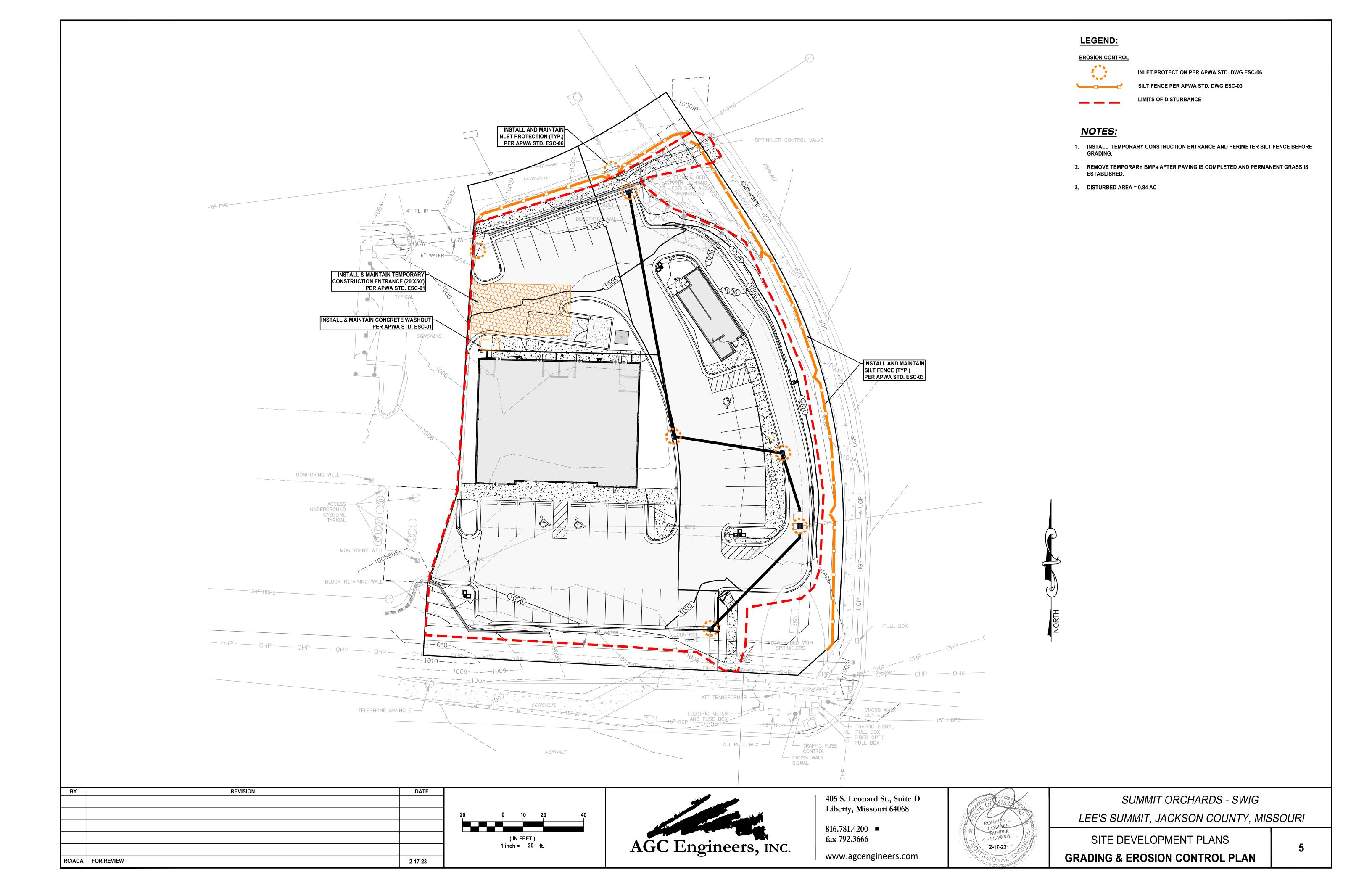
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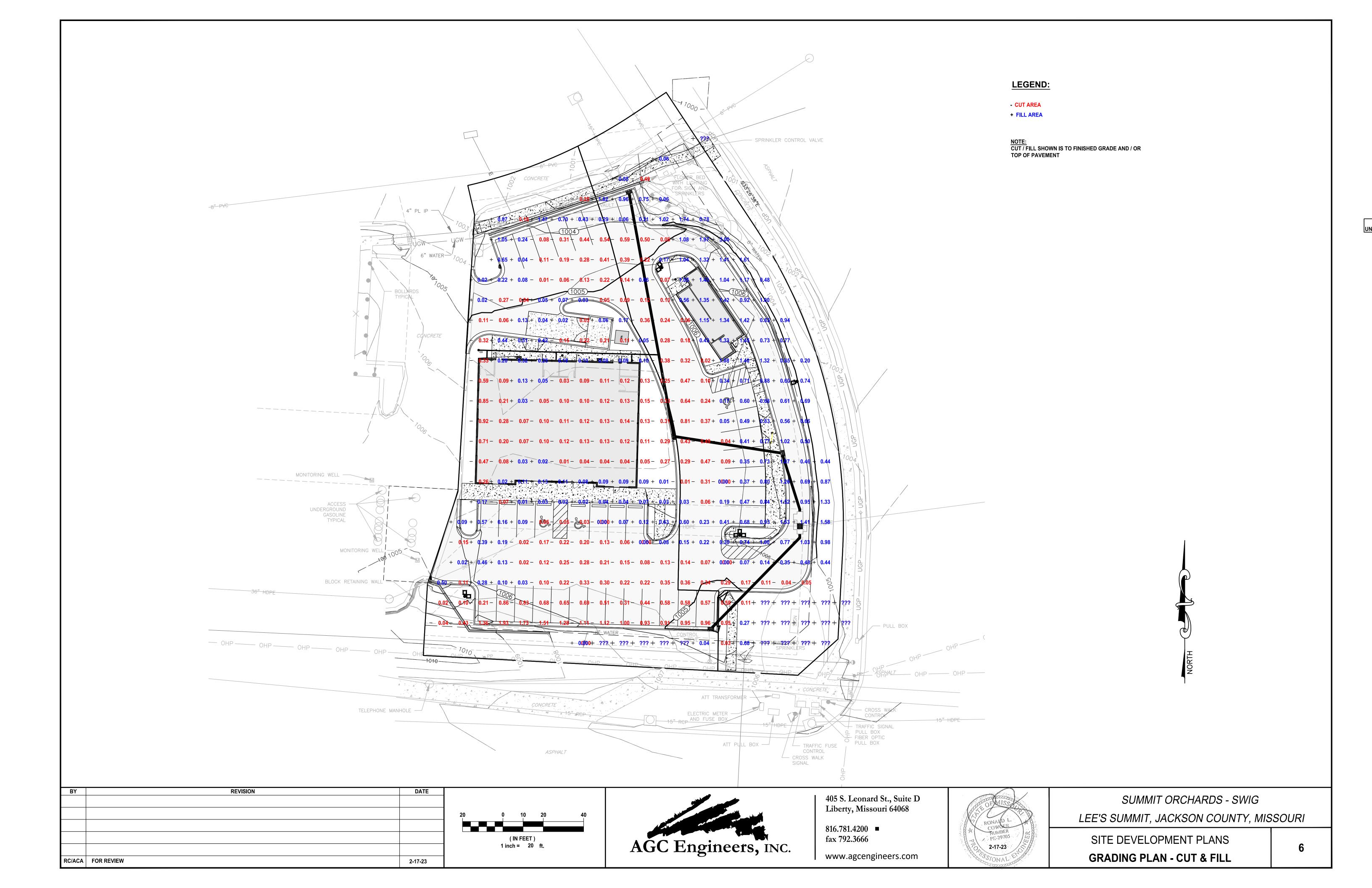
SUMMIT ORCHARDS - SWIG LEE'S SUMMIT, JACKSON COUNTY, MISSOURI

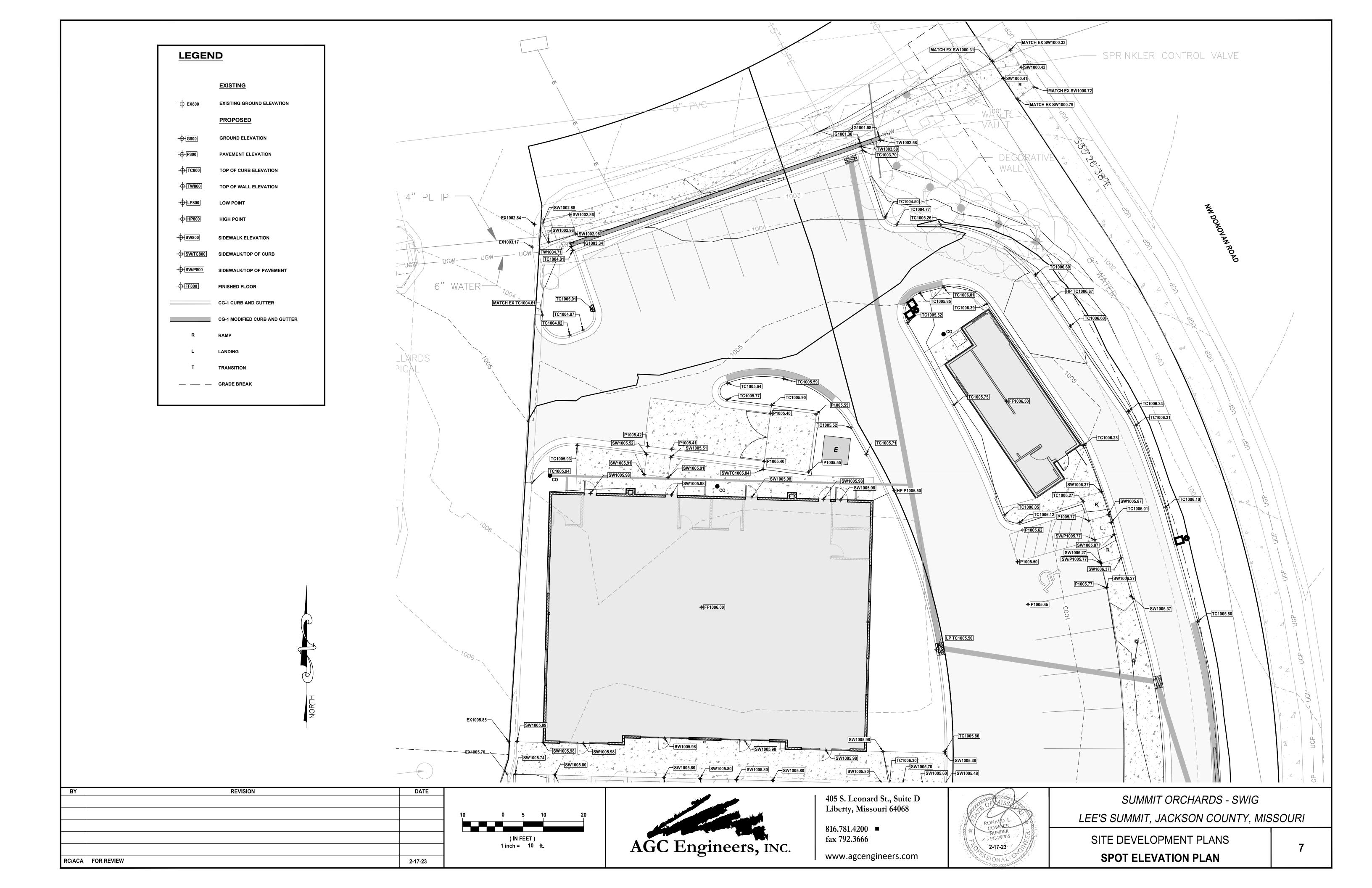
SITE DEVELOPMENT PLANS
PROPOSED MINOR PLAT

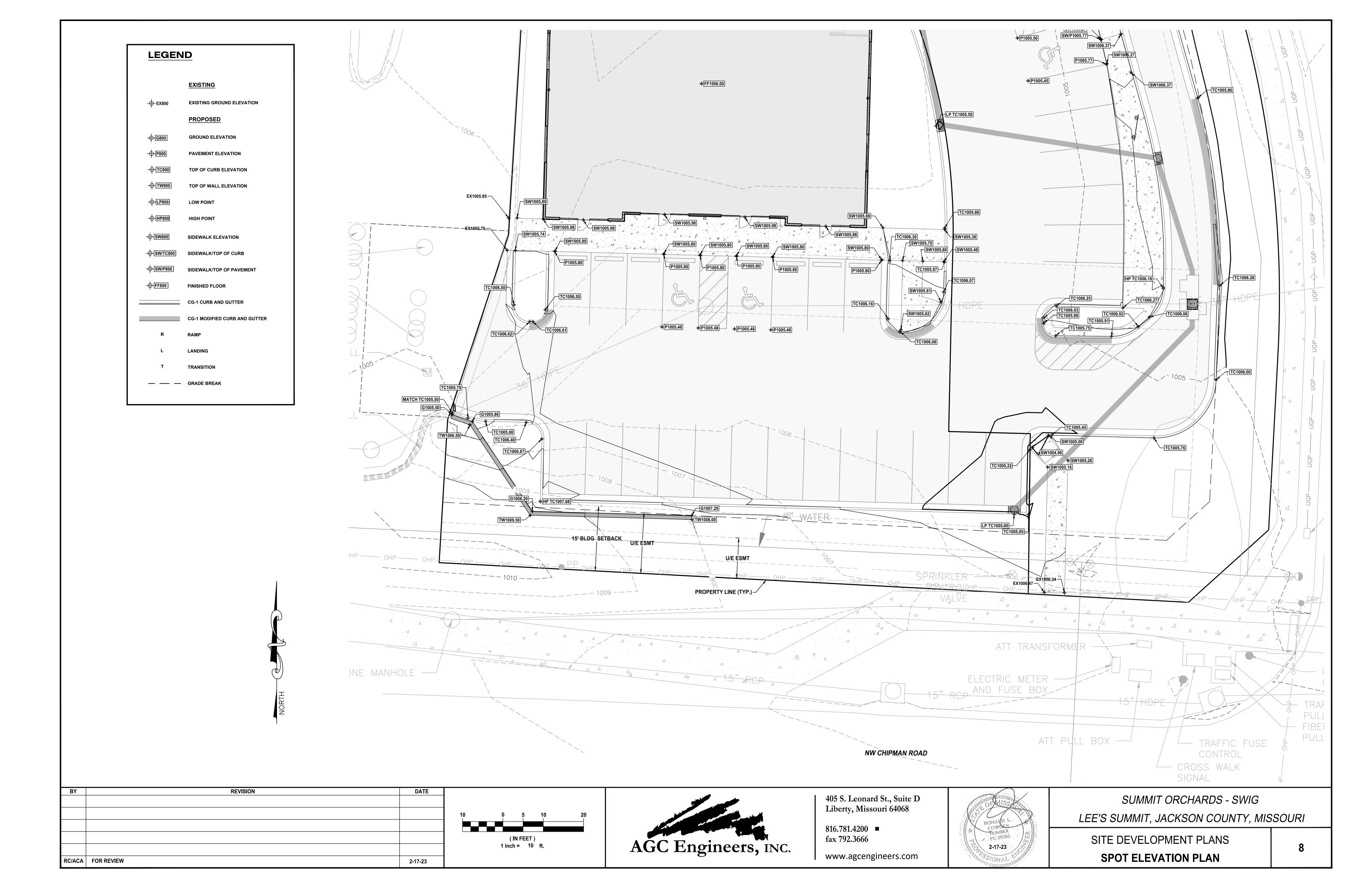
3B

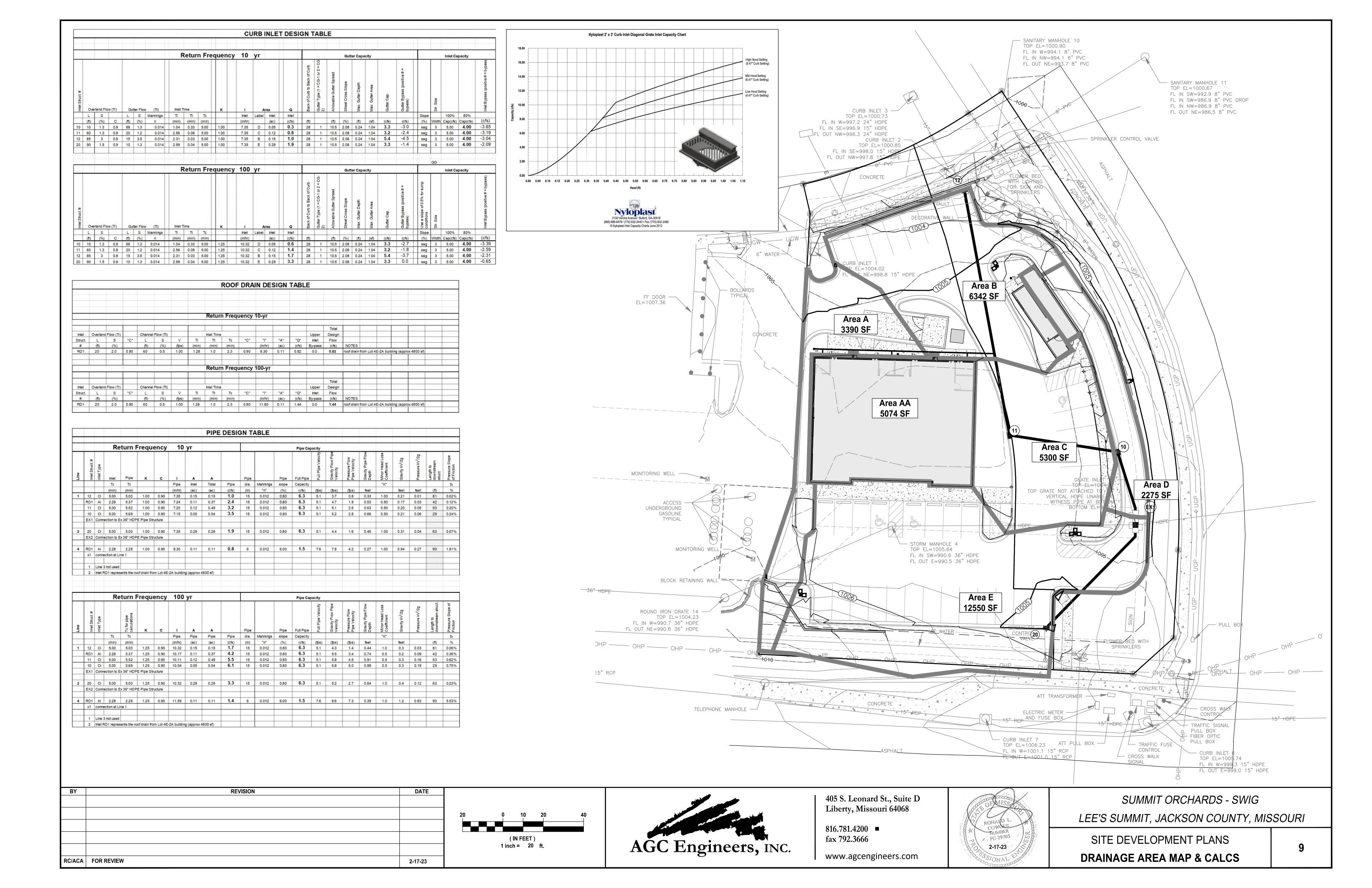


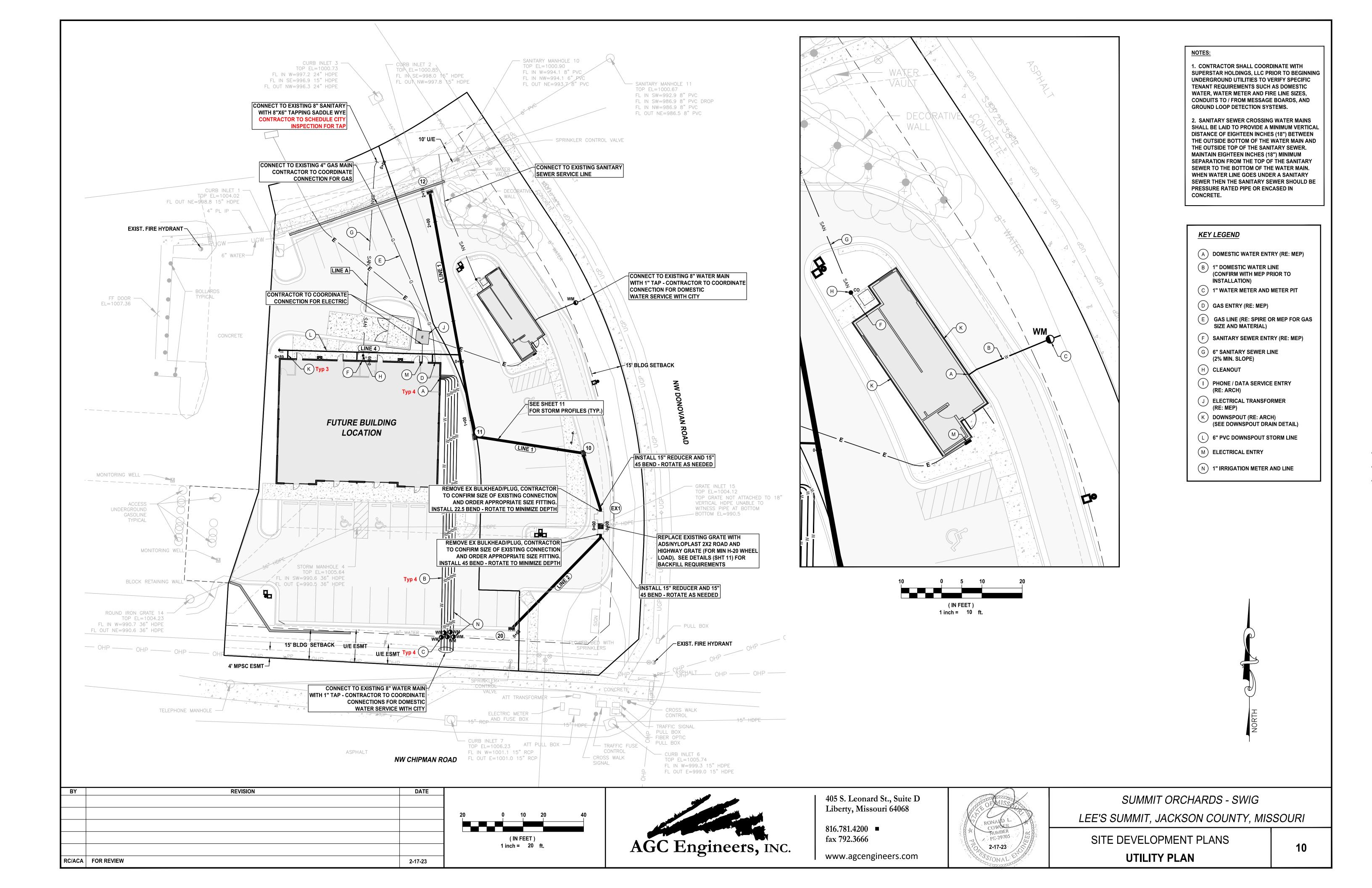


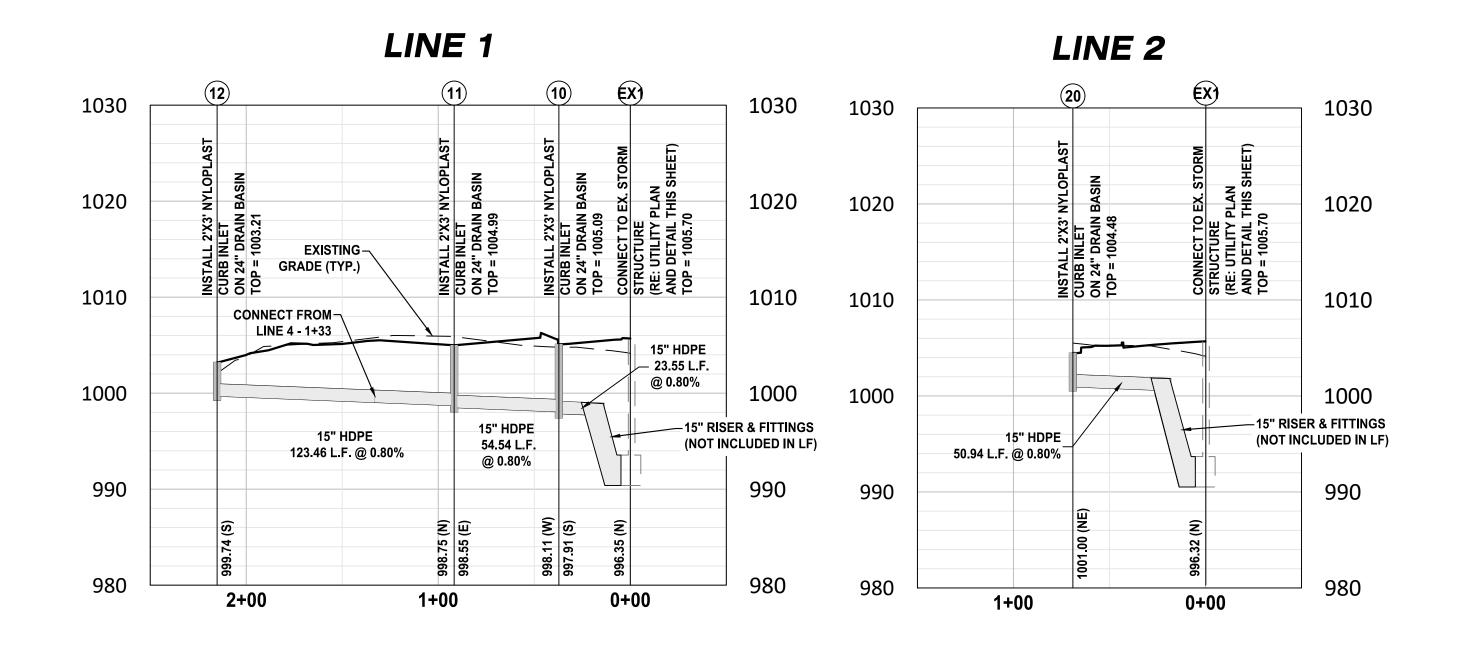










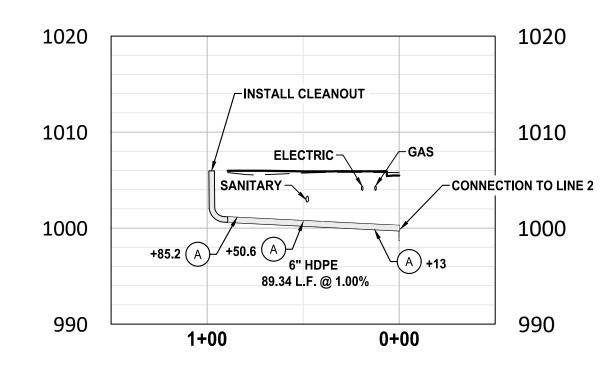


NOTES:

1. CONTRACTOR SHALL COORDINATE WITH SUPERSTAR HOLDINGS, LLC PRIOR TO BEGINNING UNDERGROUND UTILITIES TO VERIFY SPECIFIC TENANT REQUIREMENTS SUCH AS DOMESTIC WATER, WATER METER AND FIRE LINE SIZES, CONDUITS TO / FROM MESSAGE BOARDS, AND GROUND LOOP DETECTION SYSTEMS.

2. SANITARY SEWER CROSSING WATER MAINS SHALL BE LAID TO PROVIDE A MINIMUM VERTICAL DISTANCE OF EIGHTEEN INCHES (18") BETWEEN THE OUTSIDE BOTTOM OF THE WATER MAIN AND THE OUTSIDE TOP OF THE SANITARY SEWER. MAINTAIN EIGHTEEN INCHES (18") MINIMUM SEPARATION FROM THE TOP OF THE SANITARY SEWER TO THE BOTTOM OF THE WATER MAIN. WHEN WATER LINE GOES UNDER A SANITARY SEWER THEN THE SANITARY SEWER SHOULD BE PRESSURE RATED PIPE OR ENCASED IN CONCRETE.

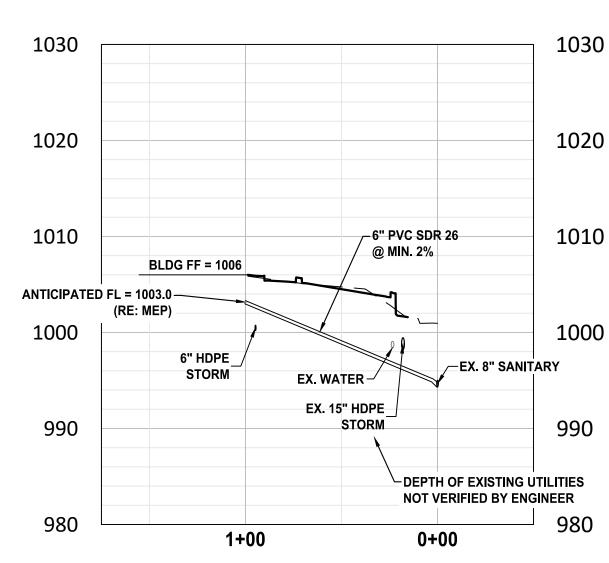
LINE 4

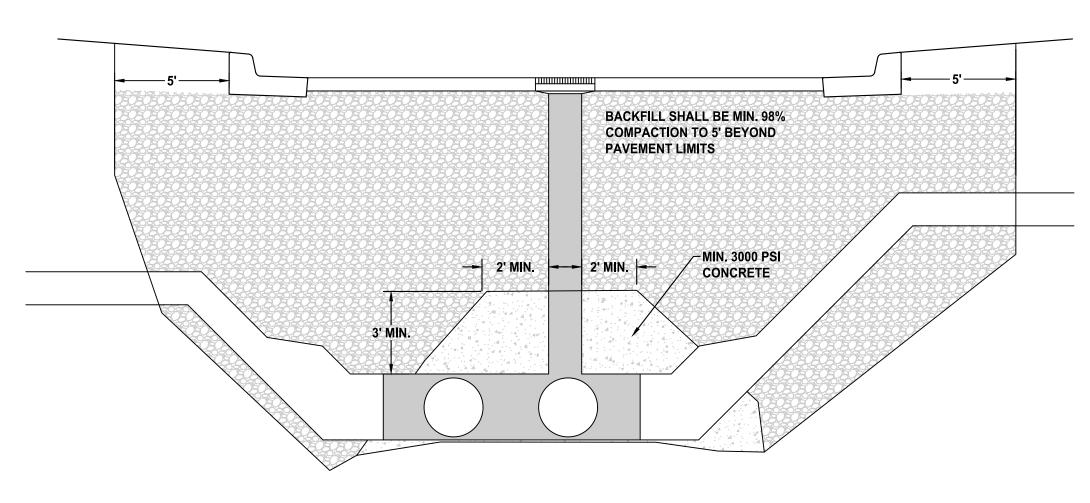


KEY LEGEND

A DOWNSPOUT CONNECTION

LINE A

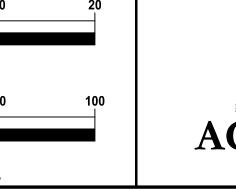




CONNECTION TO EXISTING STORM STRUCTURE

NOT TO SCALE

BY	REVISION	DATE	10	0	5	10
				(VERT	Γ. IN FEE h = 10	ΞT)
				1 incl	h = 10	ft.
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RC/ACA	FOR REVIEW	2-17-23		1 inch	= 50	ft.
			*			





LINE 3 NOT USED

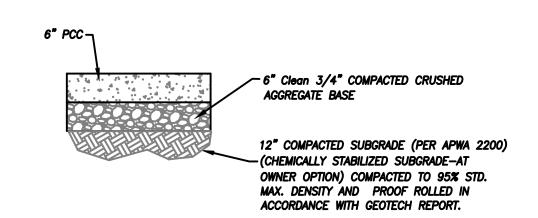
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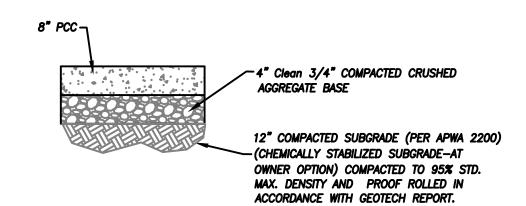
SUMMIT ORCHARDS - SWIG LEE'S SUMMIT, JACKSON COUNTY, MISSOURI

SITE DEVELOPMENT PLANS **UTILITY PROFILES**



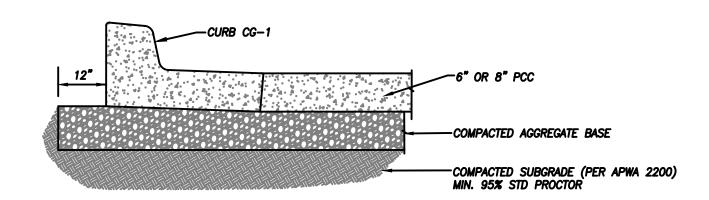
NORMAL DUTY CONCRETE SECTION

NOT TO SCALE



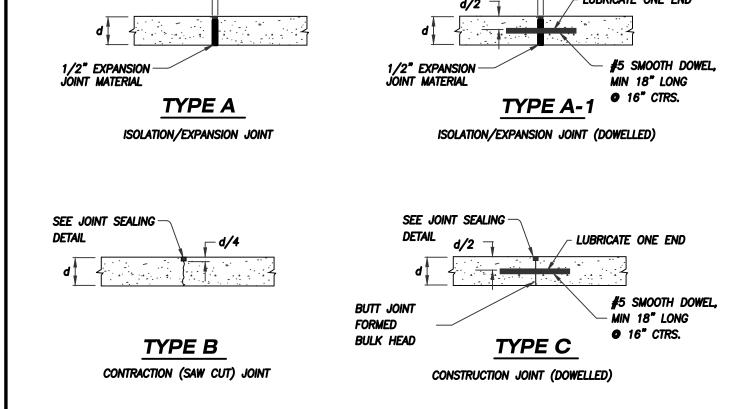
HEAVY DUTY CONCRETE SECTION

NOT TO SCALE



- EXTEND BASE SECTION 12" BEHIND CURB
- SEE PAVEMENT SECTIONS FOR TYPE & THICKNESS

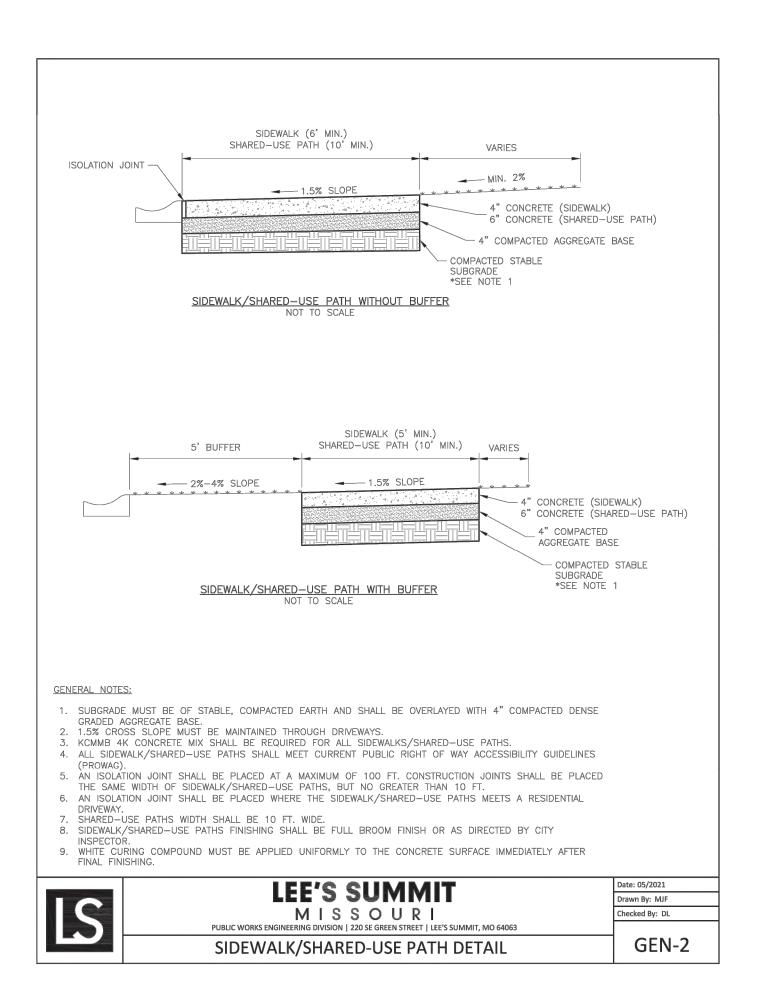
CURB & GUTTER BASE SECTION

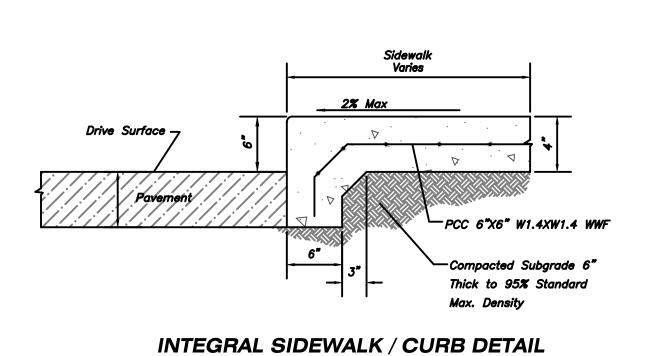


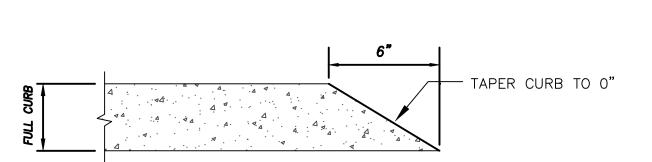
CONCRETE JOINT DETAILS NOT TO SCALE

RC/ACA FOR REVIEW

REVISION





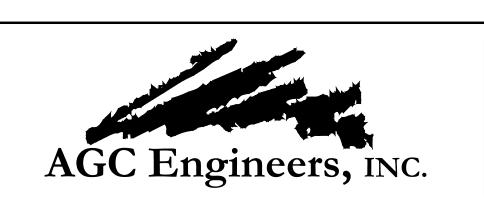


NOT TO SCALE

CURB TERMINATION DETAIL NOT TO SCALE

DATE

2-17-23





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2-17-23

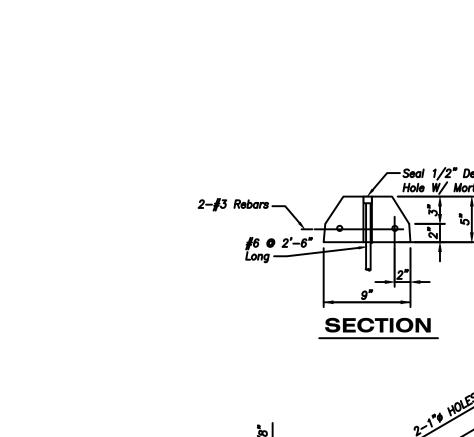
SUMMIT ORCHARDS - SWIG

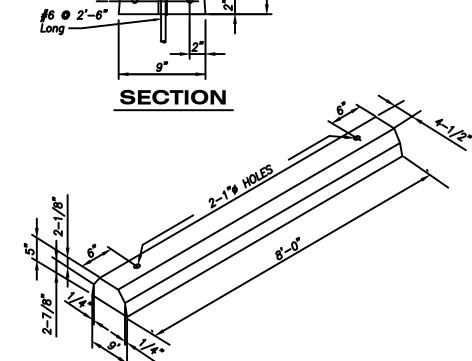
LEE'S SUMMIT, JACKSON COUNTY, MISSOURI

CONDUIT PER ELECTRICAL DESIGN CONCRETE SHALL BE 4000 PSI MIN.

CONCRETE LIGHT POLE BASE DETAIL FOR POLE < 15 FOOT

SITE DEVELOPMENT PLANS **DETAILS**





- PAVEMENT SURFACE

SMOOTH DOWEL (TYP)

(TYPE C-1)

STRAIGHT BACK CURB &

(TYPE CG-1)

4" - 8" - 8" - 4" -

<u>STRAIGHT BACK DRY CURB &</u>

(TYPE CG-1 DRY)

TOP OF SURFACE COURSE

- TOP OF BASE COURSE

DOWELLED CURB

(TYPE DC)

4" + 8" - 8" - 4" + 4"

ROLL BACK CURB & <u>GUTTER</u>

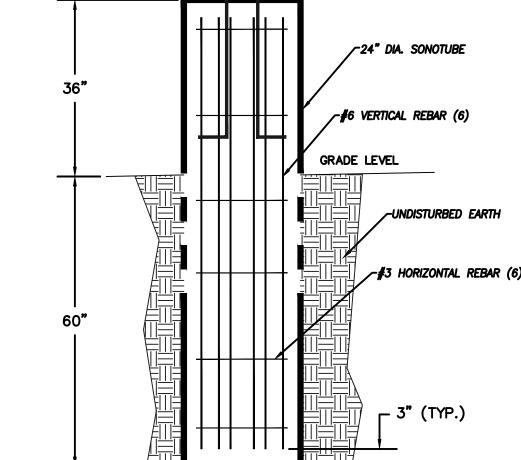
(TYPE CG-2)

4" + 8" - 8" - 4" +

ROLL BACK DRY CURB &

(TYPE CG-2 DRY)

24"



CURB & GUTTER DETAIL AT RAMP

(ADA SLOPE REQUIREMENTS)

2" ASPHALTIC CONCRETE SURFACE COURSE

- CURB & GUTTER

CURB REPLACEMENT DETAIL

 34" ISOLATION JOINTS WITH 3 (2'-#5 BAR) SMOOTH DOWELS SHALL BE PLACED AT RADIUS POINTS AND AT 150' INTERVALS. THESE DOWEL BARS SHALL BE GREASED AND WRAPPED ON ONE

2. 3" DEEP CONTRACTION JOINTS SHALL BE INSTALLED AT APPROXIMATELY 10' INTERVALS. THESE JOINTS SHALL PASS

3. CONCRETE FILL SHALL HAVE UNIFORM AND SMOOTH FINISH

5. ASPHALTIC CONCRETE SURFACE COURSE SHALL CONFORM TO STANDARD SPECIFICATIONS SECTION 2205.2.

6. CURBS FOR NEW STREETS SHALL BE BUILT ON ASPHALT OR AGGREGATE BASE AS SHOWN IN TYPICAL SECTION DETAIL.

7. WHITE CURING COMPOUND MUST BE APPLIED UNIFORMLY TO THE CONCRETE SURFACE IMMEDIATELY AFTER FINAL FINISHING.

-ANCHOR BOLTS PER LIGHT POLE MANUFACTURER

4. KCMMB 4K CONCRETE SHALL BE USED FOR ALL CURB.

8. ALL DOWELS & TIE BARS SHALL BE EPOXY COATED.

ACROSS THE ENTIRE CURB SECTION.

GENERAL NOTES

COMPACTED _

STABLE SUBGRADE

CONCRETE FILL (DEPTH

VARIES, 4" MINIMUM) -

- SAW CUT TO AGGREGATE

LEXISTING PAVEMENT

L W Z

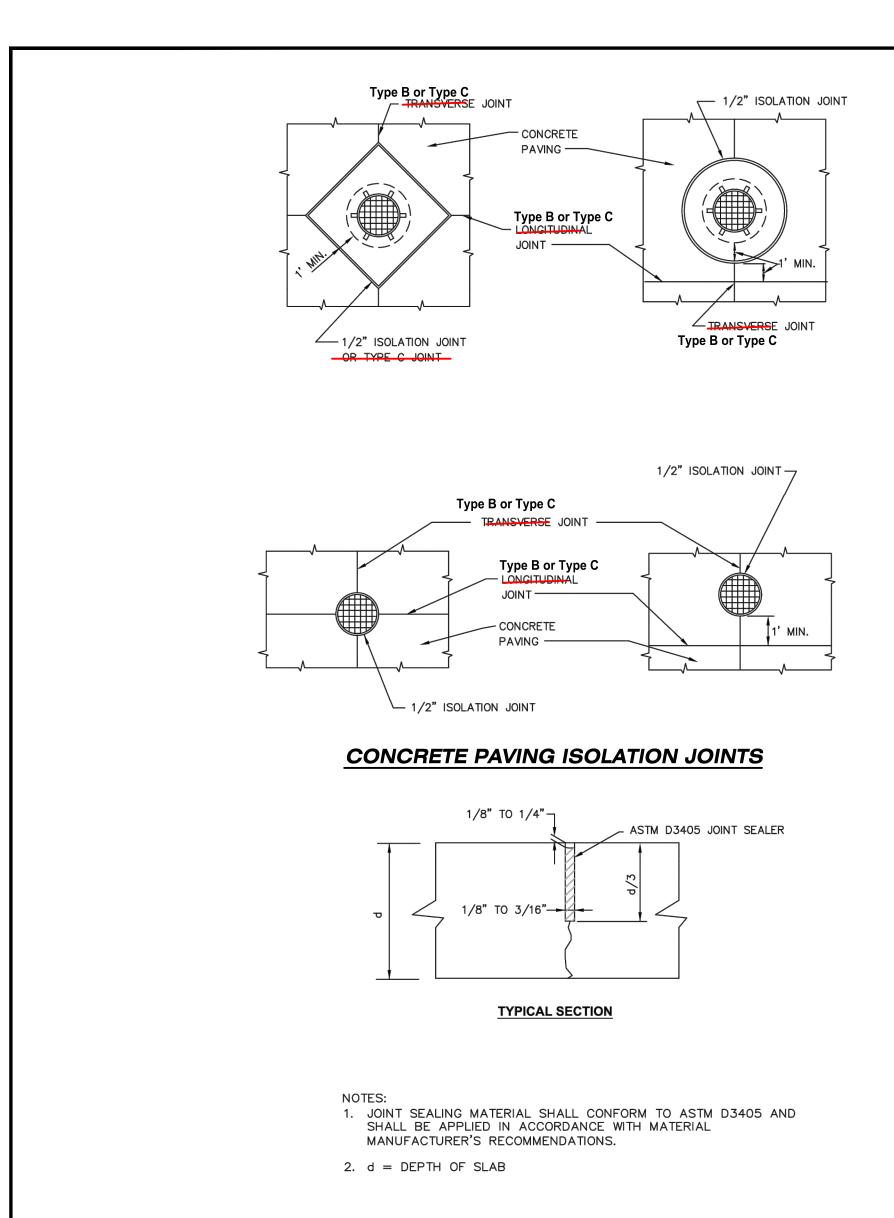
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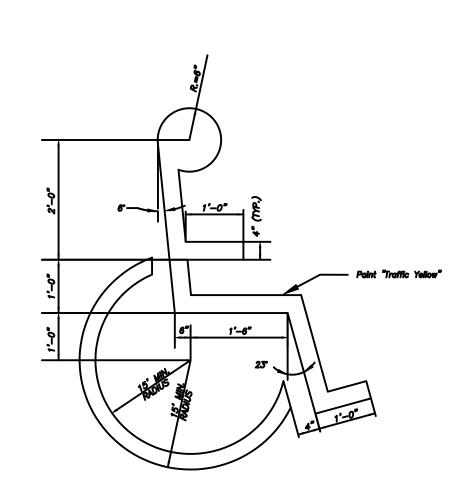
GEN-4

PRECAST CONCRETE WHEEL STOP

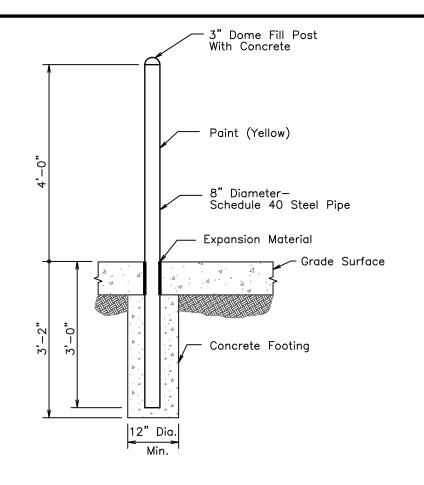
NOT TO SCALE



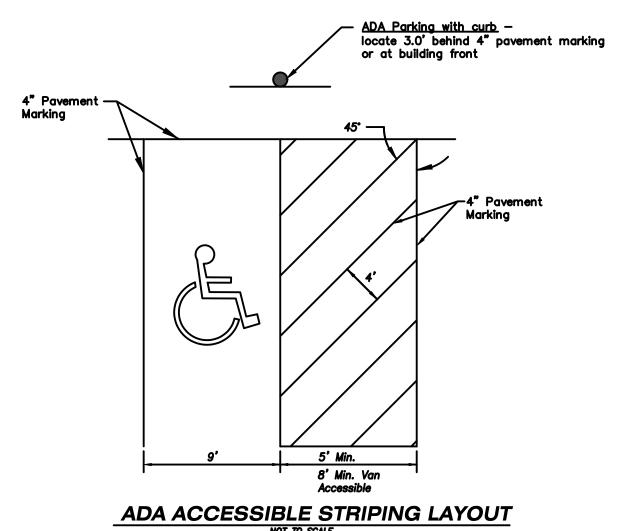
CONCRETE PAVING JOINT SEALING

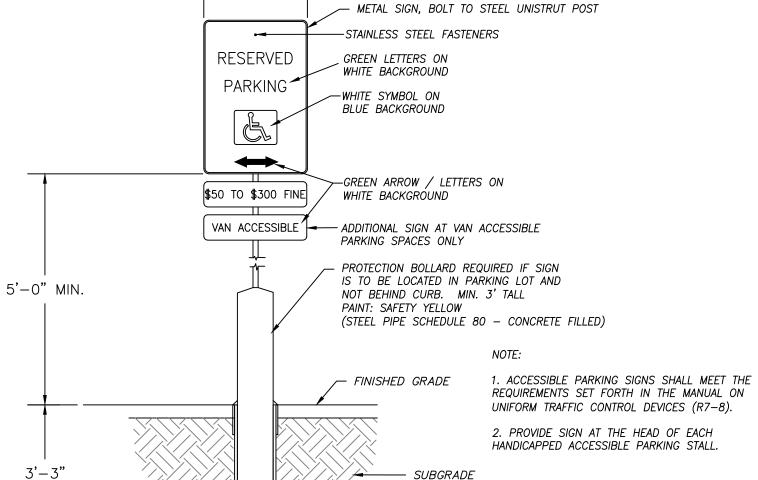


ACCESSIBLE PARKING SYMBOL



BOLLARD NOT TO SCALE

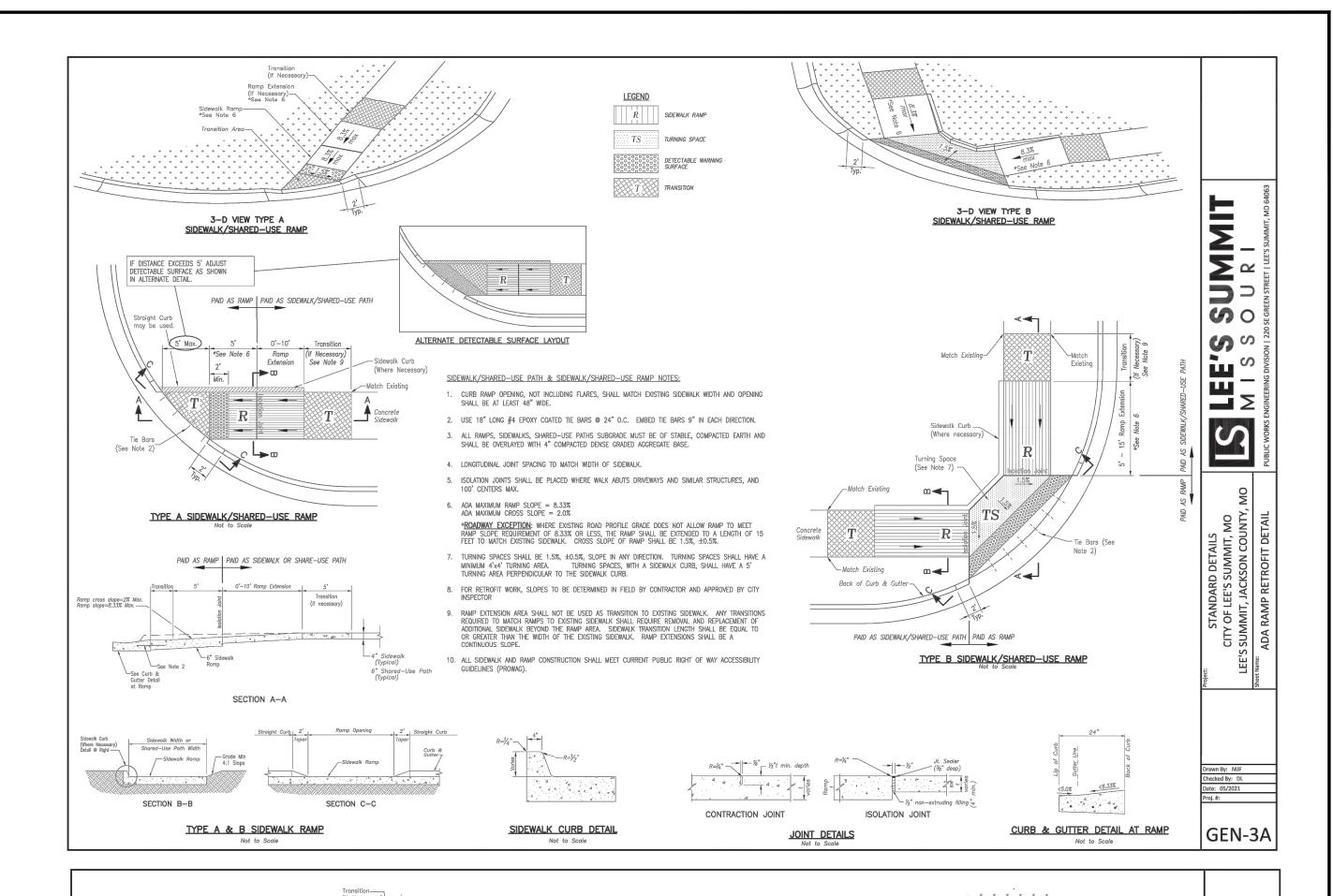


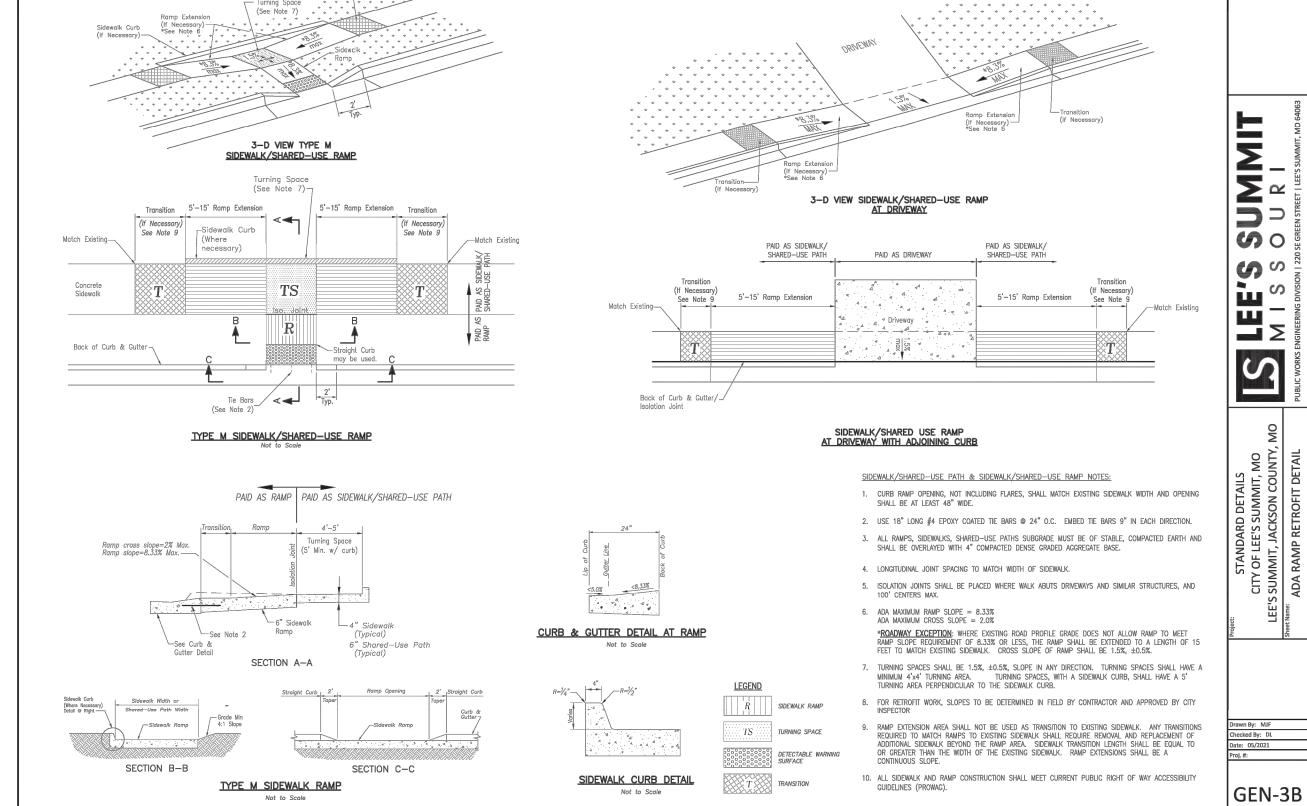


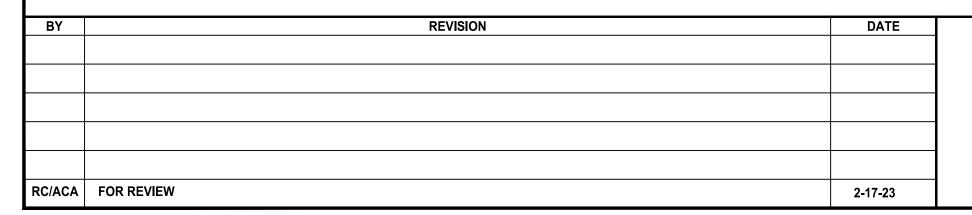
- SUBGRADE

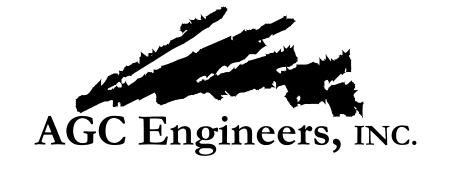
5" SCH 80 PVC PIPE SLEEVE

HANDICAP BOLLARD / SIGN NOT TO SCALE









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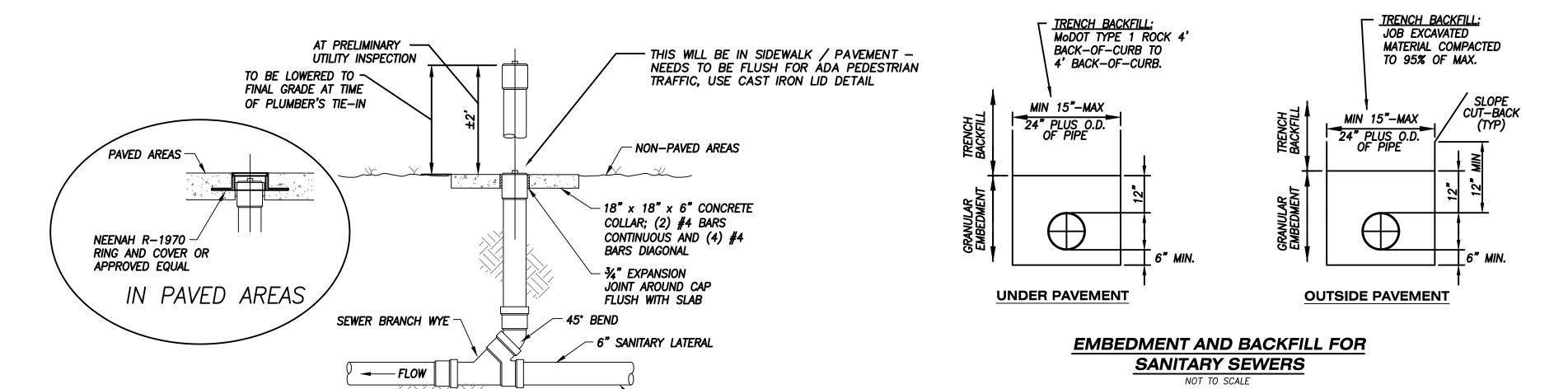
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SUMMIT ORCHARDS - SWIG LEE'S SUMMIT, JACKSON COUNTY, MISSOURI

SITE DEVELOPMENT PLANS **DETAILS**



COMPACTED TRENCH — BACKFILL 95% OF

STANDARD PROCTOR. UNDER PAVEMENT OR FUTURE PAVEMENT

> COMPACTED -GRANULAR BEDDING &

> > H25 (FLEXIBLE PAVEMENT) H25 (RIGID PAVEMENT)

HEAVY CONSTRUCTION

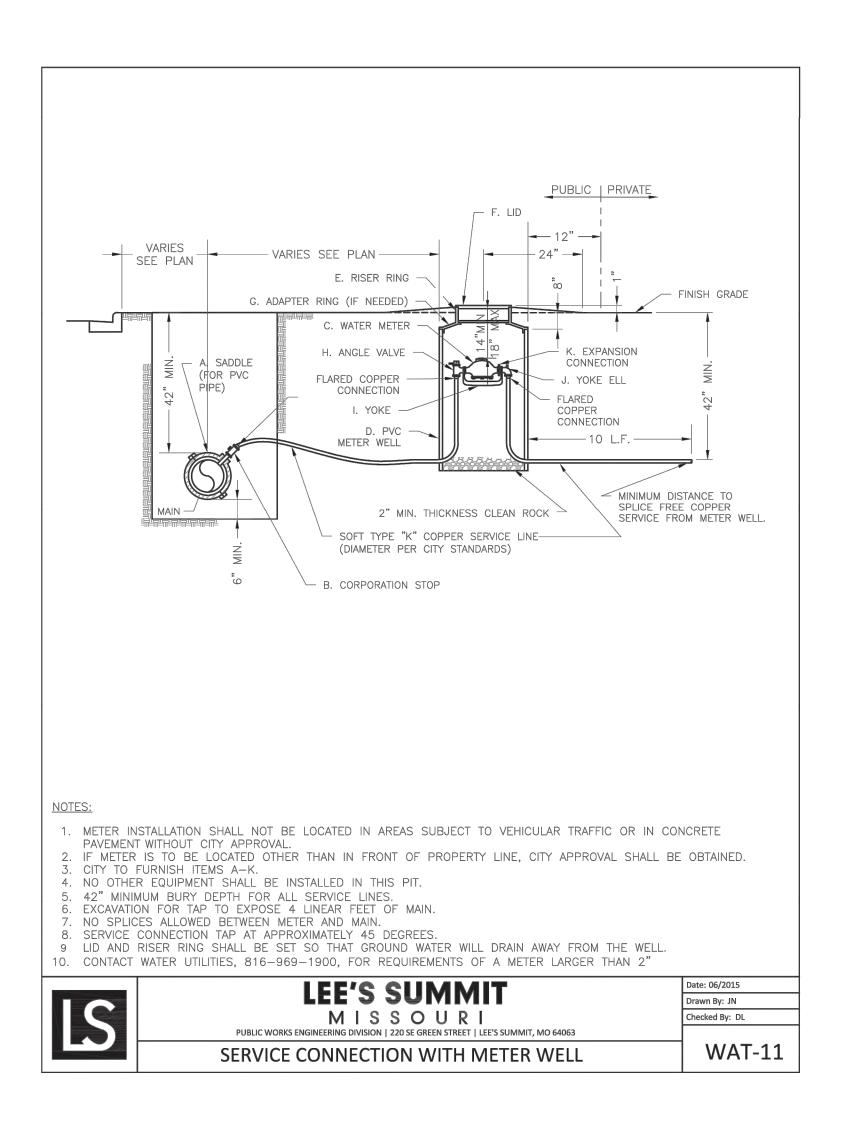
E80 RAILWAY

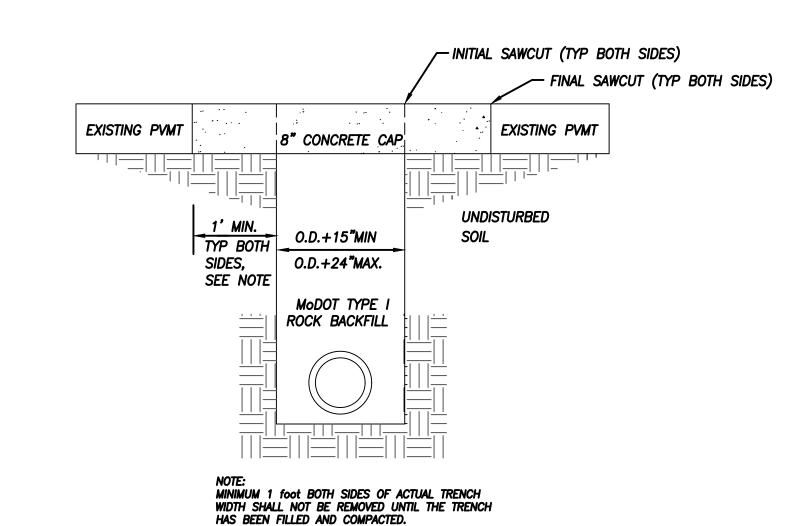
BACKFILL

USE COMPACTED GRANULAR BACKFILL

MINIMUM SLOPE

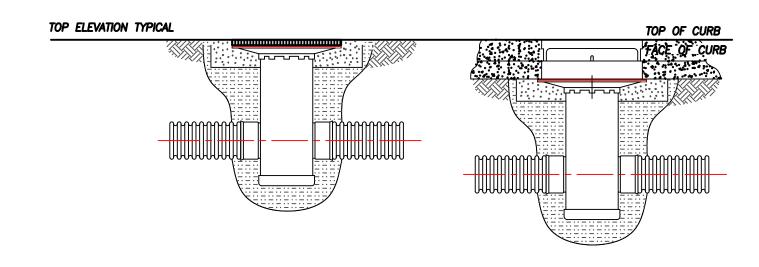
CLEAN-OUT DETAIL NOT TO SCALE





STREET CROSSING RESTORATION DETAIL

NOT TO SCALE



CONSTRUCTION STAKING DETAIL NYLOPLAST CURB INLET / DRAIN BASIN
NOT TO SCALE

1. <u>FOUNDATION</u>: WHERE THE TRENCH BOTTOM IS UNSTABLE, THE CONTRACTOR SHALL EXCAVATE TO A DEPTH REQUIRED BY THE ENGINEER AND REPLACE WITH A FOUNDATION OF CLASS I OR II MATERIAL AS DEFINED IN ASTM D2321, "STANDARD PRACTICE FOR INSTALLATION OF THERMOPLASTIC PIPE FOR SEWERS AND OTHER GRAVITY—FLOW APPLICATIONS," LATEST EDITION: AS AN ALTERNATIVE AND AT THE DISCRETION OF THE ENGINEER, THE TRENCH BOTTOM MAY BE STABILIZED USING WOVEN GEOTEXTILE FABRIC.

2. <u>BEDDING</u>: SUITABLE MATERIAL SHALL BE CLASS I, II OR III AND INSTALLED AS REQUIRED IN ASTM D2321, LATEST EDITION. UNLESS OTHERWISE SPECIFIED BY THE ENGINEER, MINIMUM BEDDING THICKNESS SHALL BE 4"; FOR 4"-24" DIA. HDPE; 6" FOR 30"-60" DIA. HDPE.

3. <u>HAUNCHING AND INITIAL BACKFILL</u>: SUITABLE MATERIAL SHALL BE CLASS I, II OR III AND INSTALLED AS REQUIRED IN ASTM D2321, LATEST EDITION.

4. UNLESS OTHERWISE SPECIFIED BY THE ENGINEER, MINIMUM TRENCH WIDTHS SHALL BE AS FOLLOWS:

NOMINAL MIN. RECOMMENDED

DIA. TRENCH WIDTH

4 21
6 23
8 25
10 28
12 31
15 34
18 39
24 48
30 66
36 78
42 83
48 89
60 102

5. MINIMUM COVER: MINIMUM RECOMMENDED DEPTHS OF COVER FOR VARIOUS LIVE LOADING CONDITIONS
ARE SUMMARIZED IN THE FOLLOWING TABLE. UNLESS OTHERWISE NOTED, ALL DIMENSIONS ARE TAKEN FROM

HDPE (HIGH DENSITY POLYETHYLENE) PIPE INSTALLATION DETAIL

— UNDISTURBED

WALL (TYP.)

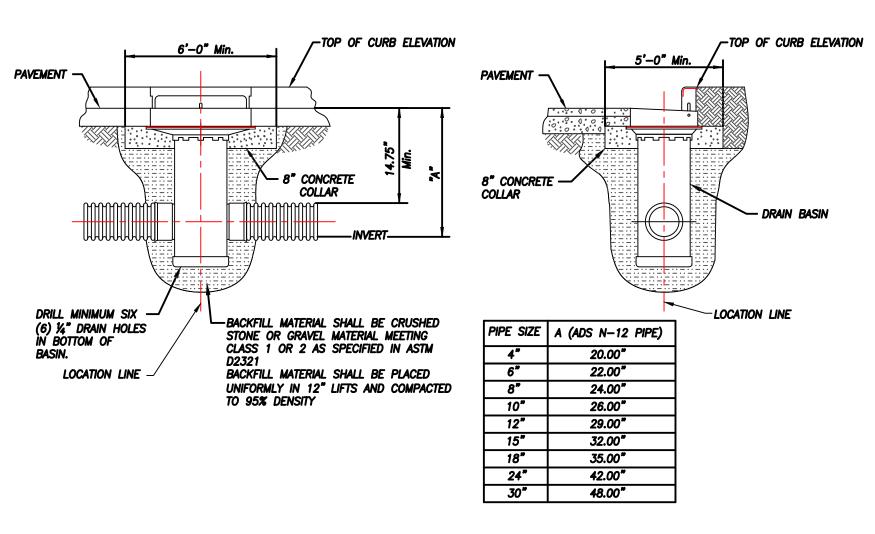
TRENCH

MINIMUM_RECOMMENDED COVER

12" (24" FOR 60" PIPE)*

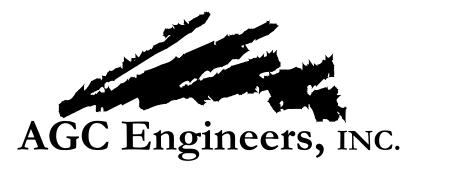
12" (24" FOR 60" PIPE)

*TOP OF PIPE TO BOTTOM OF BITUMINOUS PAVEMENT SECTION THE TOP OF THE PIPE TO THE GROUND SURFACE.



NYLOPLAST DRAIN BASIN - TYPICAL INSTALLATION NOT TO SCALE

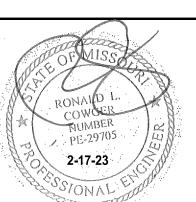
BY	REVISION	DATE	
RC/ACA	FOR REVIEW	2-17-23	



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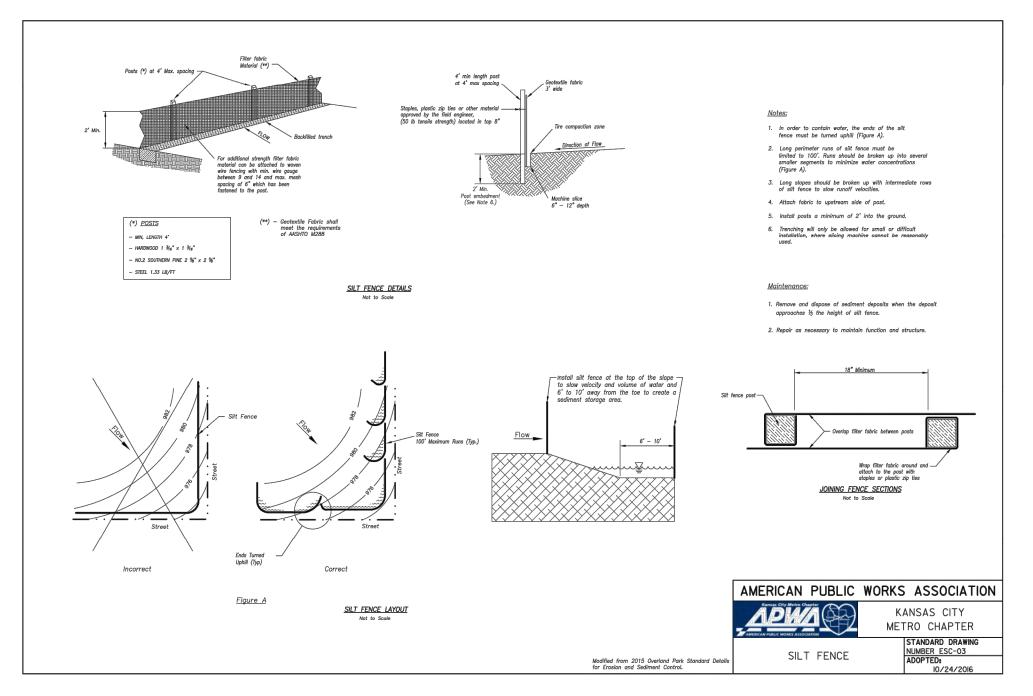
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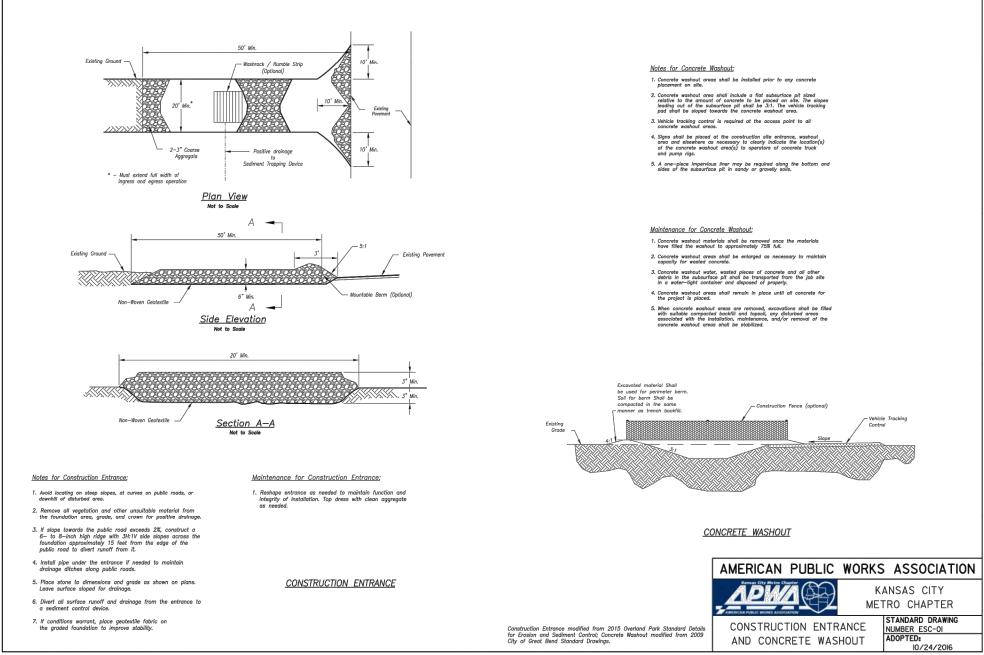
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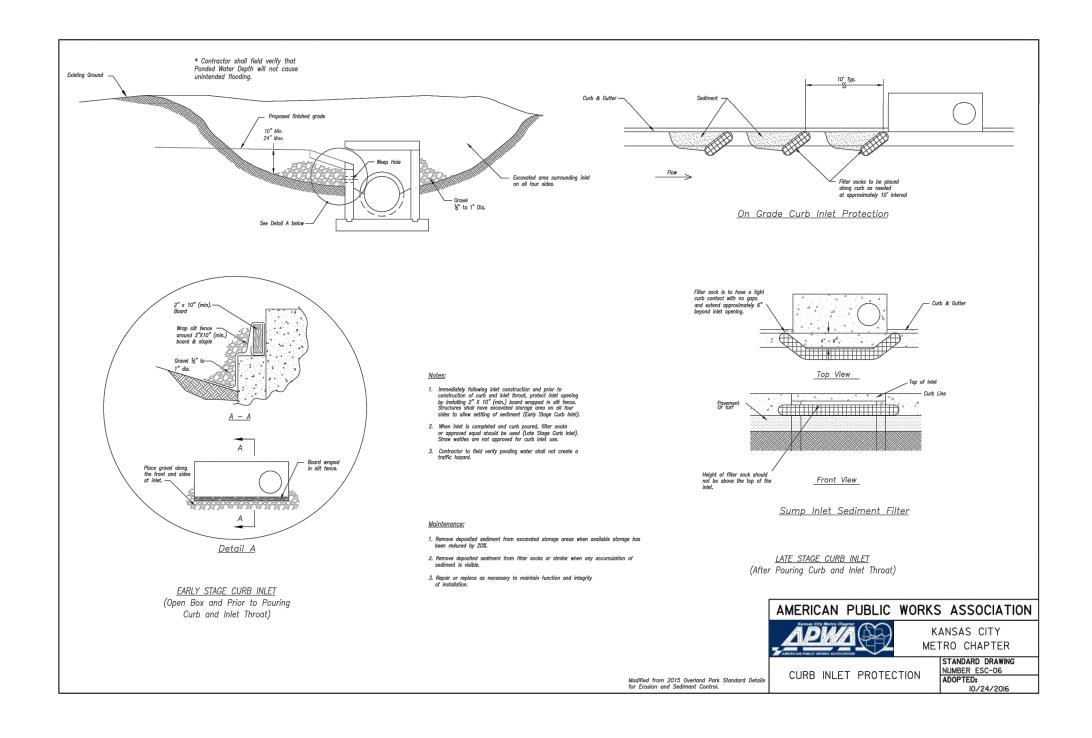


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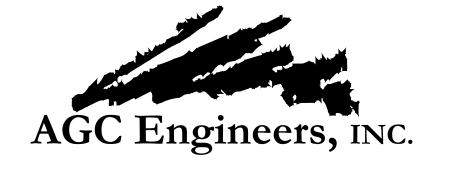
SITE DEVELOPMENT PLANS **DETAILS**







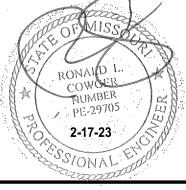
BY	REVISION	DATE
RC/ACA	FOR REVIEW	2-17-23



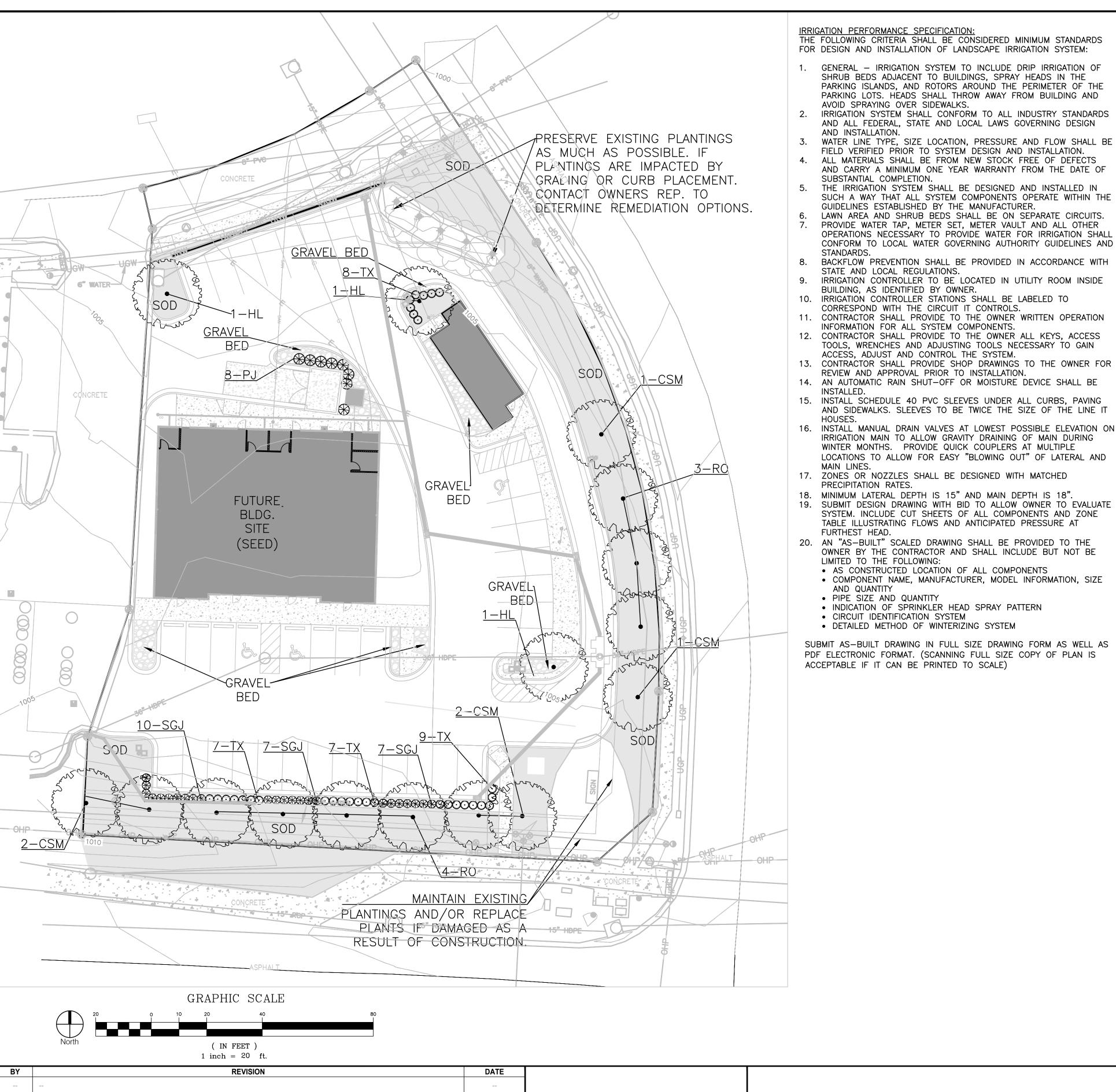
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2/16/23

1.27.2023

OWNER CHANGES

SITE DEVELOPMENT PLAN

IRRIGATION PERFORMANCE SPECIFICATION:
THE FOLLOWING CRITERIA SHALL BE CONSIDERED MINIMUM STANDARDS

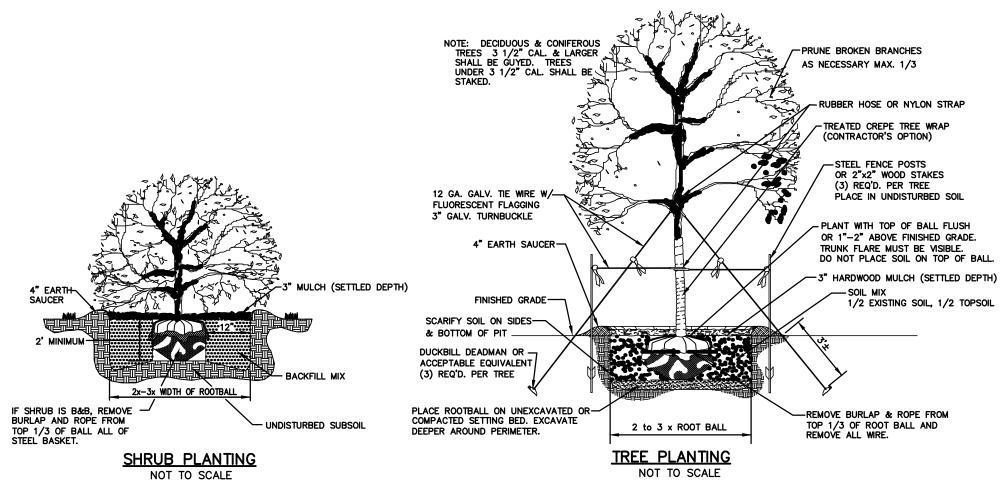
FOR DESIGN AND INSTALLATION OF LANDSCAPE IRRIGATION SYSTEM:

- 1. GENERAL IRRIGATION SYSTEM TO INCLUDE DRIP IRRIGATION OF SHRUB BEDS ADJACENT TO BUILDINGS, SPRAY HEADS IN THE PARKING ISLANDS, AND ROTORS AROUND THE PERIMETER OF THE PARKING LOTS. HEADS SHALL THROW AWAY FROM BUILDING AND
- IRRIGATION SYSTEM SHALL CONFORM TO ALL INDUSTRY STANDARDS AND ALL FEDERAL, STATE AND LOCAL LAWS GOVERNING DESIGN
- WATER LINE TYPE, SIZE LOCATION, PRESSURE AND FLOW SHALL BE FIELD VERIFIED PRIOR TO SYSTEM DESIGN AND INSTALLATION.
- ALL MATERIALS SHALL BE FROM NEW STOCK FREE OF DEFECTS AND CARRY A MINIMUM ONE YEAR WARRANTY FROM THE DATE OF
- THE IRRIGATION SYSTEM SHALL BE DESIGNED AND INSTALLED IN SUCH A WAY THAT ALL SYSTEM COMPONENTS OPERATE WITHIN THE
- LAWN AREA AND SHRUB BEDS SHALL BE ON SEPARATE CIRCUITS. PROVIDE WATER TAP, METER SET, METER VAULT AND ALL OTHER OPERATIONS NECESSARY TO PROVIDE WATER FOR IRRIGATION SHALL
- BACKFLOW PREVENTION SHALL BE PROVIDED IN ACCORDANCE WITH
- STATE AND LOCAL REGULATIONS. IRRIGATION CONTROLLER TO BE LOCATED IN UTILITY ROOM INSIDE
- BUILDING, AS IDENTIFIED BY OWNER. 10. IRRIGATION CONTROLLER STATIONS SHALL BE LABELED TO
- CORRESPOND WITH THE CIRCUIT IT CONTROLS.
- 11. CONTRACTOR SHALL PROVIDE TO THE OWNER WRITTEN OPERATION INFORMATION FOR ALL SYSTEM COMPONENTS. 12. CONTRACTOR SHALL PROVIDE TO THE OWNER ALL KEYS, ACCESS
- TOOLS, WRENCHES AND ADJUSTING TOOLS NECESSARY TO GAIN ACCESS, ADJUST AND CONTROL THE SYSTEM. 13. CONTRACTOR SHALL PROVIDE SHOP DRAWINGS TO THE OWNER FOR
- REVIEW AND APPROVAL PRIOR TO INSTALLATION. 14. AN AUTOMATIC RAIN SHUT-OFF OR MOISTURE DEVICE SHALL BE
- 15. INSTALL SCHEDULE 40 PVC SLEEVES UNDER ALL CURBS, PAVING
- 16. INSTALL MANUAL DRAIN VALVES AT LOWEST POSSIBLE ELEVATION ON IRRIGATION MAIN TO ALLOW GRAVITY DRAINING OF MAIN DURING WINTER MONTHS. PROVIDE QUICK COUPLERS AT MULTIPLE
- 17. ZONES OR NOZZLES SHALL BE DESIGNED WITH MATCHED
- 18. MINIMUM LATERAL DEPTH IS 15" AND MAIN DEPTH IS 18". 19. SUBMIT DESIGN DRAWING WITH BID TO ALLOW OWNER TO EVALUATE SYSTEM. INCLUDE CUT SHEETS OF ALL COMPONENTS AND ZONE
- 20. AN "AS-BUILT" SCALED DRAWING SHALL BE PROVIDED TO THE OWNER BY THE CONTRACTOR AND SHALL INCLUDE BUT NOT BE
- AS CONSTRUCTED LOCATION OF ALL COMPONENTS • COMPONENT NAME, MANUFACTURER, MODEL INFORMATION, SIZE
- PIPE SIZE AND QUANTITY
- INDICATION OF SPRINKLER HEAD SPRAY PATTERN
- CIRCUIT IDENTIFICATION SYSTEM
- DETAILED METHOD OF WINTERIZING SYSTEM

SUBMIT AS-BUILT DRAWING IN FULL SIZE DRAWING FORM AS WELL AS PDF ELECTRONIC FORMAT. (SCANNING FULL SIZE COPY OF PLAN IS ACCEPTABLE IF IT CAN BE PRINTED TO SCALE)

<u>LANDSCAPING NOTES:</u>

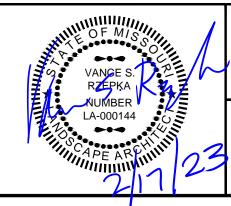
- LOCATE ALL UTILITIES BEFORE LANDSCAPE CONSTRUCTION BEGINS. NOTIFY OWNER REPRESENTATIVE OF ANY LAYOUT DISCREPANCIES.
- 3. ALL EXTERIOR GROUND WITHIN THE LIMITS OF THE CONTRACT, EXCEPT FOR SURFACES OCCUPIED BY BUILDINGS, STRUCTURES, PAVING, AND AS DIRECTED ON THE DRAWINGS AS UNDISTURBED, SHALL BE FILLED WITH SIX INCHES (6") OF
- 4. ALL DISTURBED AREAS NOT DESIGNATED FOR OTHER PLANTING SHALL BE SODDED. SOD SHALL CONSIST OF 90% TURF TYPE TALL FESCUE 10% BLUEGRASS.
- 5. WEED MAT SHALL BE USED UNDER ALL PLANTING AREAS NOT TO BE SODDED OR AS DIRECTED ON THE DRAWINGS. THE MAT SHALL BE COVERED WITH MULCH AND SECURED IN-PLACE BY A SOIL ANCHOR.
- 6. QUANTITIES INDICATED IN PLANT LIST ARE FOR CONVENIENCE ONLY. CONTRACTOR IS RESPONSIBLE FOR PLANT QUANTITIES
- AS ILLUSTRATED ON THE PLAN. 7. SHREDDED HARDWOOD MULCH SHALL BE USED AS THREE INCH (3") TOP DRESSING IN ALL PLANT BEDS AND AROUND ALL TREES. SINGLE TREES OR SHRUBS SHALL BE MULCHED TO THE OUTSIDE EDGE OF SAUCER OR LANDSCAPE ISLAND (SEE
- PLANTING DETAILS). 8. PROVIDE STEEL EDGING AROUND ALL SHRUB AND GROUNDCOVER BEDS. STEEL EDGING SHALL BE 1/8" x 4" WITH CLIPS AND REBAR STAKES FIVE FEET(5') ON CENTER.
- 9. FERTILIZE ALL PLANTS AT THE TIME OF PLANTING WITH TIME-RELEASE FERTILIZER(3-4 SLOW-RELEASE TABLETS/PELLETS).
- 10. IF LEANING OCCURS WITHIN ONE YEAR, TREES SHALL BE RE-STAKED (SEE PLANTING DETAILS). 11. CONTRACTOR SHALL STAKE ALL PLANT MATERIALS PRIOR TO INSTALLATION FOR THE PURPOSE OF DETERMINING CONFLICTS
- WITH ROCK, UTILITIES, ETC. NO PLANTS CAN BE PLANTED DIRECTLY ON ROCK OR UTILITIES. NOTIFY ARCHITECT/ENGINEER/OWNER AT ONCE IF ANY CONFLICTS OCCUR. CONTRACTOR WILL BE REQUIRED TO ADJUST PLANT LOCATIONS AT NO ADDITIONAL COST.
- 12. CONTRACTOR IS RESPONSIBLE FOR WATERING ALL SOD UNTIL ROOTS HAVE KNOTTED INTO SOIL AND OWNER HAS OCCUPIED
- 13. PROVIDE "GATOR" BAGS ON ALL TREES. REFILL AS NECESSARY UNTIL OWNER OCCUPIES THE BUILDING.
- 14. PROVIDE ROLLED EROSION CONTROL MAT, NORTH AMERICAN GREEN SC150BN OR APPROVED EQUAL OVER ALL NATIVE GRASS
- 15. GRAVEL BEDS PROVIDE AND INSTALL HEAVY DUTY WEED BARRIER FABRIC UNDER GRAVEL. PROVIDE AND INSTALL 3"
- DEPTH OF 1"-2" MULTI-COLORED WASHED RIVER GRAVEL, SUBMIT COLOR SAMPLE TO OWNER FOR APPROVAL.



PLA	ANT	SCHEDULE		
KEY	QTY.	BOTANICAL NAME	COMMON NAME	SIZE/REMARKS
TREES	•			•
CSM	6	ACER SACHARUM 'AUTUMN SPLENDOR'	CADDO SUGAR MAPLE	3" CAL. B&B
HL	3	GLEDITISA TRIACANTHOS 'SKYLINE'	SKYLINE HONEYLOCUST	3" CAL. B&B
RO	7	QUERCUS RUBRA	RED OAK	3" CAL. B&B
PJ	8	JUNIPEROUS CHINENSIS 'PERFECTA'	PERFECTA JUNIPER	6' HT. B&B
SHRUB	S/GRAS	SES/GROUNDCOVER		•
SGJ	24	JUNIPEROUS CHINENSIS 'SEA GREEN'	SEA GREEN JUNIPER	5 GAL
TX	31	TAXUS x MEDIA 'DENSIFORMIS'	DENSIFORMIS YEW	5 GAL

LANDSCAPE WORKSHEET

	LANDSCAPE WORKS		
	ORDINANCE REQUIREMENT	REQUIRED FOR THIS SITE	PROPOSED (EXISTING AND NEW LANDSCAPE)
8.790.A.1 Street Frontage Trees (NW Chipman)	1 tree per 30 feet of street frontage	215 ft. of street frontage /30 = 8 trees required	8 trees
8.790.A.3 Street Frontage Shrubs (NW Chipman)	1 shrub per 20 feet of street frontage	215 ft. of street frontage /20 = 11 shrubs required	11 shrubs *
8.790.A.2 Street Frontage Green Strip (NW Chipman)	20 feet	20 feet	20 feet
8.790.B.1 Open Yard Shrubs	2 shrubs per 5000 sq. ft. of total lot area excluding building footprint.	20,452 sq.ft. of total lot area minus 678 sq.ft. of bldg. = 19,774/5,000 x 2 = 8 shrubs.	8 shrubs
8.790.B.3 Open Yard Trees	1 tree per 3000 sq. ft. of total lot area excluding building and parking.	20,452 sq.ft. of total lot area minus 678 sq.ft. of bldg. 19,774/3,000 = 7 trees.	7 trees
8.810. Parking Lot Landscape Islands	5% of entire parking area (spaces, aisles & drives); 1 island at end of every parking bay, min. 9' wide	18,707 sq.ft. of parking area x .05 = 935 sq.ft. of landscape parking lot islands required	1,008 sq.ft.
8.820 Screening of Parking Lot, NW Chipman	12 shrubs per 40 linear feet (must be 2.5 feet tall; berms may be combined with shrubs)	120 linear feet/40 x 12 = 36 shrubs required.	36 shrubs

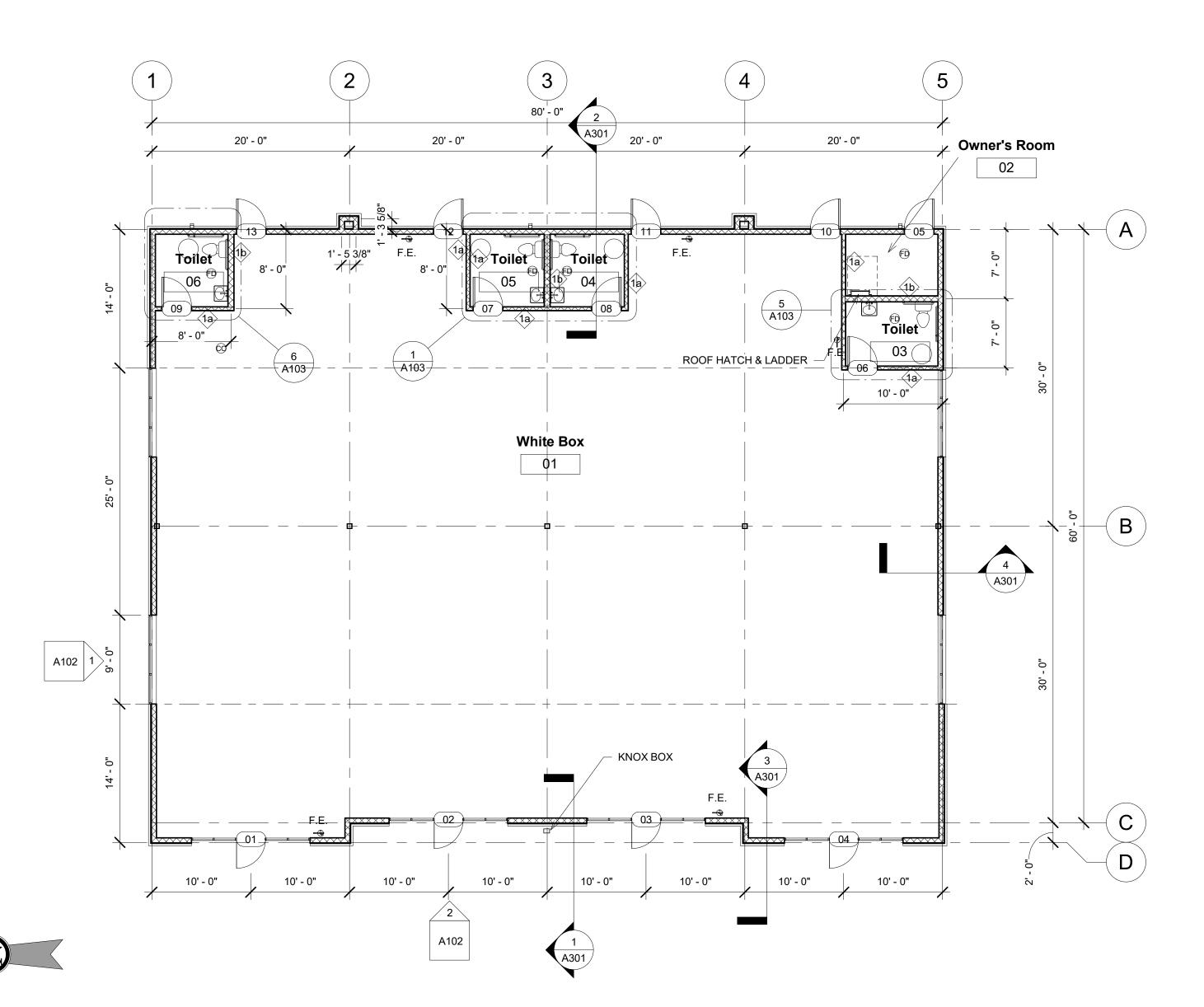


SUMMIT ORCHARDS-SWIG LEE'S SUMMIT, JACKSON COUNTY, MISSOURI

LANDSCAPE PLAN

LS101







APPLICABLE CODES
2018 INTERNATIONAL BUILDING CODE

2018 INTERNATIONAL MECHANICAL CODE 2018 INTERNATIONAL PLUMBING CODE

2018 INTERNATIONAL ENERGY CONSERVATION CODE 2017 NATIONAL ELECTRICAL CODE

THIS SUBMITTAL. SEPARATE TENANT FINISH PLANS WILL BE

OCCUPANCY CLASSIFICATION M (RETAIL) & B (OFFICE)

TYPE OF CONSTRUCTION V-B, NON - SPRINKLED

FLOOR AREA BUILDING AREA: 4,880 SQ.FT.

OCCUPANT LOAD
TO BE DETERMINED

INTERIOR FINISH REQUIREMENTS FLOOR FINISHES: CLASS I or CLASS II WALL FINISHES: CLASS A (non-sprinkled)
CEILING FINISHES: CLASS A (non-sprinkled)

SPECIAL KNOWLEDGE OR EFFORT.

NUMBERS AND/OR LETTERS. EACH CHARACTER SHALL BE NOT LESS THAN 6" HIGH WITH A MINIMUM STROKE WIDTH OF 1.0" INCHES. THEY SHOULD BE INSTALLED ON A CONTRASTING BACKGROUND. STREET FACING DOORS SHALL HAVE ADDRESSES THAT ARE PLAINLY LEGIBLE AND VISIBLE FROM THE STREET FRONTING THE PROPERTY. ADDRESS NUMBERS AND/OR LETTERS SHALL BE ARABIC NUMBERS OR ALPHABETIC LETTERS.



2018 INTERNATIONAL FIRE CODE

2017 ICC/ANSI A117.1

SUMMARY OF WORK
NEW SHELL SPEC BUILDING. NO C.O. IS REQUESTED WITH SUBMITTED FOR EACH SPACE AT A LATER DATE.

EXITS REQUIRED
TO BE DETERMINED

TOILET FACILITIES REQUIRED
TO BE DETERMINED

TOILET FACILITIES PROVIDED
ONE UNISEX TOILET PER SPACE (ADA

DEFERRED SUBMITTALS TO BE COMPLETED BY OTHERS ROOF TRUSS PLANS (PLANS BY SUBCONTRACTOR)

EGRESS DOORS SHALL BE READILY OPENABLE FROM THE EGRESS SIDE WITHOUT THE USE OF A KEY OR

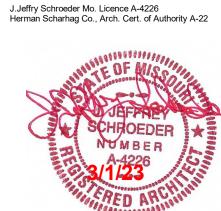
PREMISES SHALL BE IDENTIFIED ON ALL EXTERIOR DOORS, WITH

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RCHARD

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UMMIT,



Description **Revision Schedule**

Floor Plan

2491 Project number 03.01.2023

A101

1/8" = 1'-0"

1 Floor Plan 1/8" = 1'-0"

			Door Schedule		
Number	Family	Туре	hardware type	Door type	Frame Type
01	Storefront Entry Single	3'.0" x 7'.0"		AL	AL
02	Storefront Entry Single	3'.0" x 7'.0"		AL	AL
03	Storefront Entry Single	3'.0" x 7'.0"		AL	AL
04	Storefront Entry Single	3'.0" x 7'.0"		AL	AL
05	Single-Flush	3 x7 Exterior	Lockset w/ lever handles, strike plate, 1 1/2 pair hinges, closer, drip cap, gasketing, bottom sweep	НМ	НМ
06	Single-Flush	3 x 7 Toilet	Latchset w/ lever handles, strike plate, 1 1/2 pair hinges, closer	WD	НМ
07	Single-Flush	3 x 7 Toilet	Latchset w/ lever handles, strike plate, 1 1/2 pair hinges, closer	WD	НМ
08	Single-Flush	3 x 7 Toilet	Latchset w/ lever handles, strike plate, 1 1/2 pair hinges, closer	WD	НМ
09	Single-Flush	3 x 7 Toilet	Latchset w/ lever handles, strike plate, 1 1/2 pair hinges, closer	WD	НМ
10	Single-Flush	3 x7 Exterior	Lockset w/ lever handles, strike plate, 1 1/2 pair hinges, closer, drip cap, gasketing, bottom sweep	НМ	НМ
11	Single-Flush	3 x7 Exterior	Lockset w/ lever handles, strike plate, 1 1/2 pair hinges, closer, drip cap, gasketing, bottom sweep	НМ	НМ
12	Single-Flush	3 x7 Exterior	Lockset w/ lever handles, strike plate, 1 1/2 pair hinges, closer, drip cap, gasketing, bottom sweep	НМ	НМ
13	Single-Flush	3 x7 Exterior	Lockset w/ lever handles, strike plate, 1 1/2 pair hinges, closer, drip cap, gasketing, bottom sweep	НМ	НМ

		Wall Schedule	
Type Mark	Туре	Type Comments	Function
1a	Interior Partition - Wood Stud	2x4 Wood studs @ 16" o.c. w/ 3 1/2" batt insulation and (1) layer 5/8" gyp. board each side. To 10'.0" aff	Interior
1b	Interior Partition -wet wall	2x6 Wood studs at 16" o.c. w/ 6" fiberglass batt insulation and (1) layer 5/8" gyp. board each side. To 10'.0" aff	Interior

			Room Schedule		
Number	Name	Base Finish	Wall Finish	Floor Finish	Ceiling Finish
01	White Box	None	Painted gyp. b'd	Concrete	None
02	Owner's Room	None	Painted gyp. b'd	Concrete	2x4 Suspended Acoustical
03	Toilet	6" rubber cove	Epoxy Paint	LVT	2x4 Suspended Acoustical
04	Toilet	6" rubber cove	Epoxy Paint	LVT	2x4 Suspended Acoustical
05	Toilet	6" rubber cove	Epoxy Paint	LVT	2x4 Suspended Acoustical
06	Toilet	6" rubber cove	Epoxy Paint	Concrete	2x4 Suspended Acoustical

CEILING HEIGHT TO BE 9'.0" AFF

HARDWARE SHALL BE MEDIUM DUTY COMMERCIAL GRADE. DOOR HARDWARE SHALL CONSIST OF BUTTS, LATCHSET OR LOCKSET, SILENCERS, SMOKE GASKETING FOR RATED DOORS, CLOSERS WHERE NOTED, PANIC DEVICES WHERE NOTED. EXTERIOR DOORS SHALL ALSO HAVE THRESHOLD, WEATHERSTRIPPING, SWEEP AND KEYED LOCK. CONTRACTOR SHALL COORDINATE ALL LATCH/LOCK FUNCTIONS AND KEYING OF LOCKS WITH OWNER. MAX. THRESHOLD = 1/2". ALL HARDWARE TO BE LEVER TYPE OR PUSH/PULL. ALL DOORS IN EGRESS PATHWAYS SHALL BE FREE TURNING FOR EXITING. ALL EGRESS DOORS SHALL BE READILY OPENABLE FROM THE EGRESS SIDE WITHOUT THE USE OF A KEY OR SPECIAL KNOWLEDGE OR EFFORT. FURTHER, ALL EGRESS DOORS FROM ROOMS AND EXTERIOR EGRESS DOORS, FOR GROUP A AND GROUP E OCCUPANCIES SHALL NOT HAVE A LOCK OR LATCH OTHER THAN PANIC

HARDWARE. ALL DOOR THRESHOLDS SHALL BE A MAX. OF ½" ABOVE FLOOR LEVEL AND BOTH SIDES SHALL BE BEVELED AT A SLOPE OF 1:2. SCHLAGE OR EQUAL

HM = 16 GA. HOLLOW METAL, PAINTED WD = SOLID CORE RED OAK, STAINED

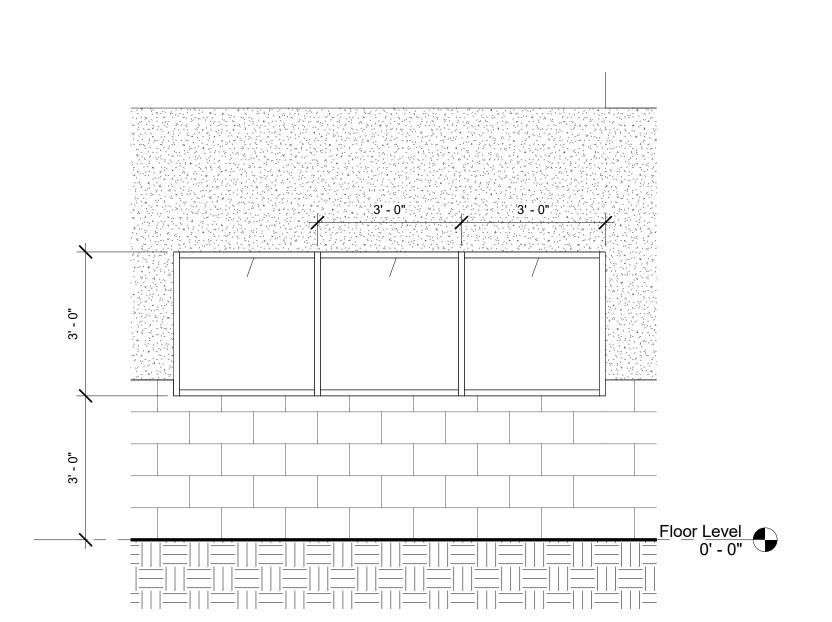
IRP = IMPACT RESISTANT PLASTIC

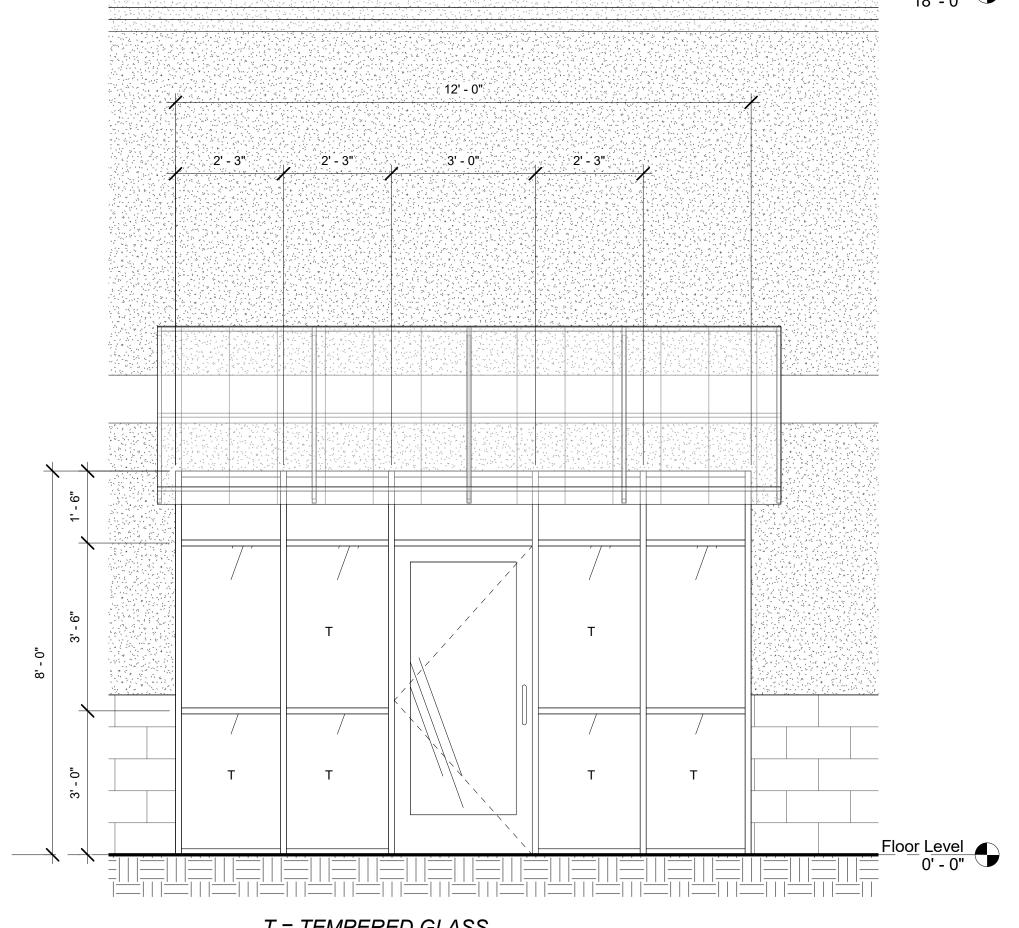
AL = ANODIZED ALUMINUM

Window Elevation
1/2" = 1'-0"

GLASS IN DOORS AND SIDELIGHTS SHALL BE SAFETY GLASS PER IBC SEC. 2406.1

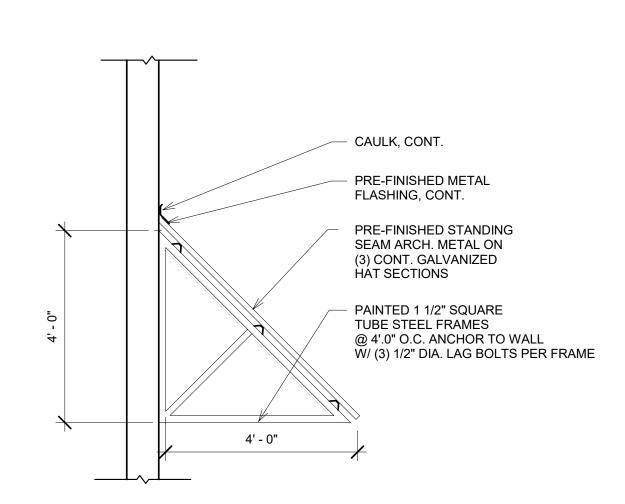
STANDARD DUTY HARDWARE (SATIN CHROME) WITH LEVERS.





T = TEMPERED GLASS

2 Entry Detail 1/2" = 1'-0"

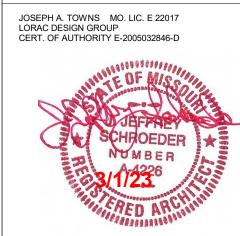


3 Awning detail 1/2" = 1'-0"

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Description Date **Revision Schedule**

Architectural **Details**

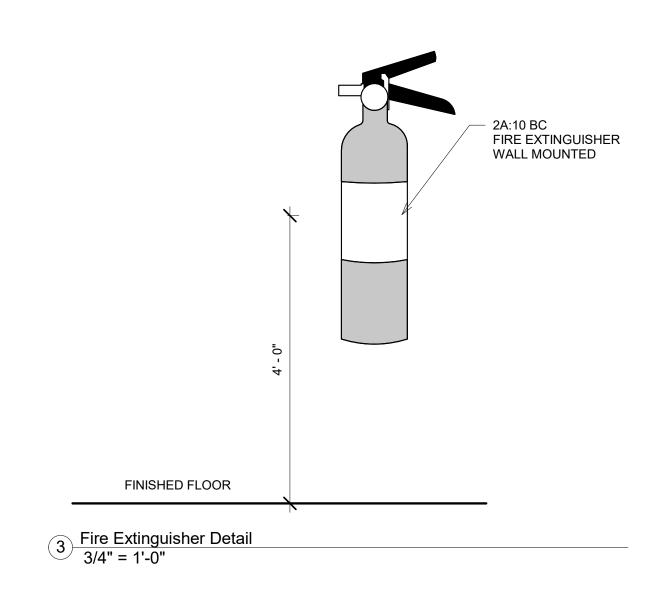
Project number

A102

As indicated

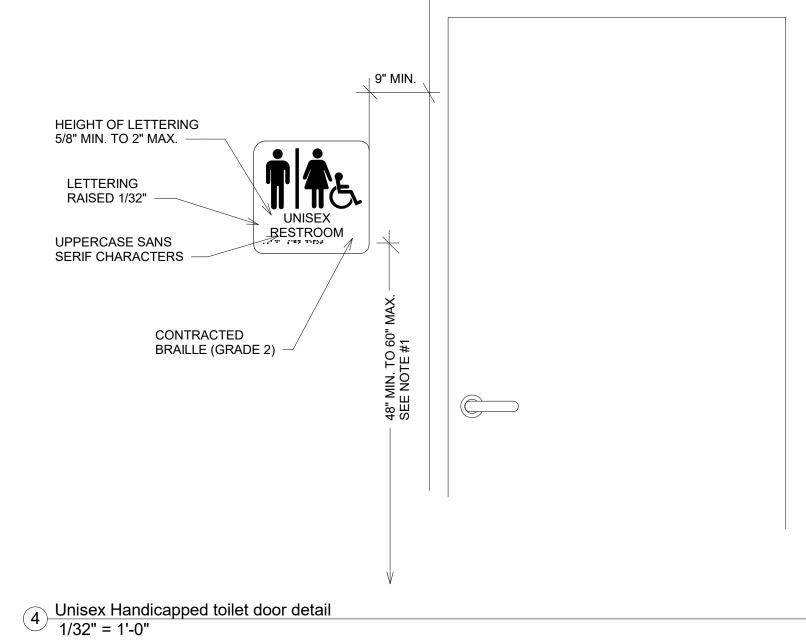
2491

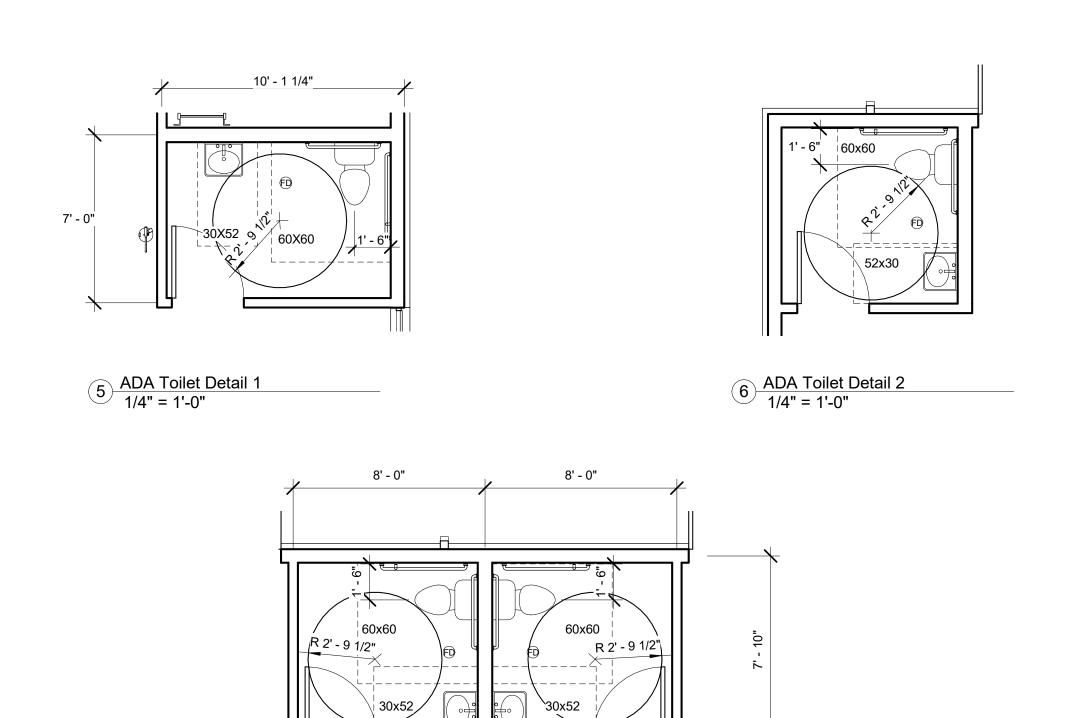
03.01.2023



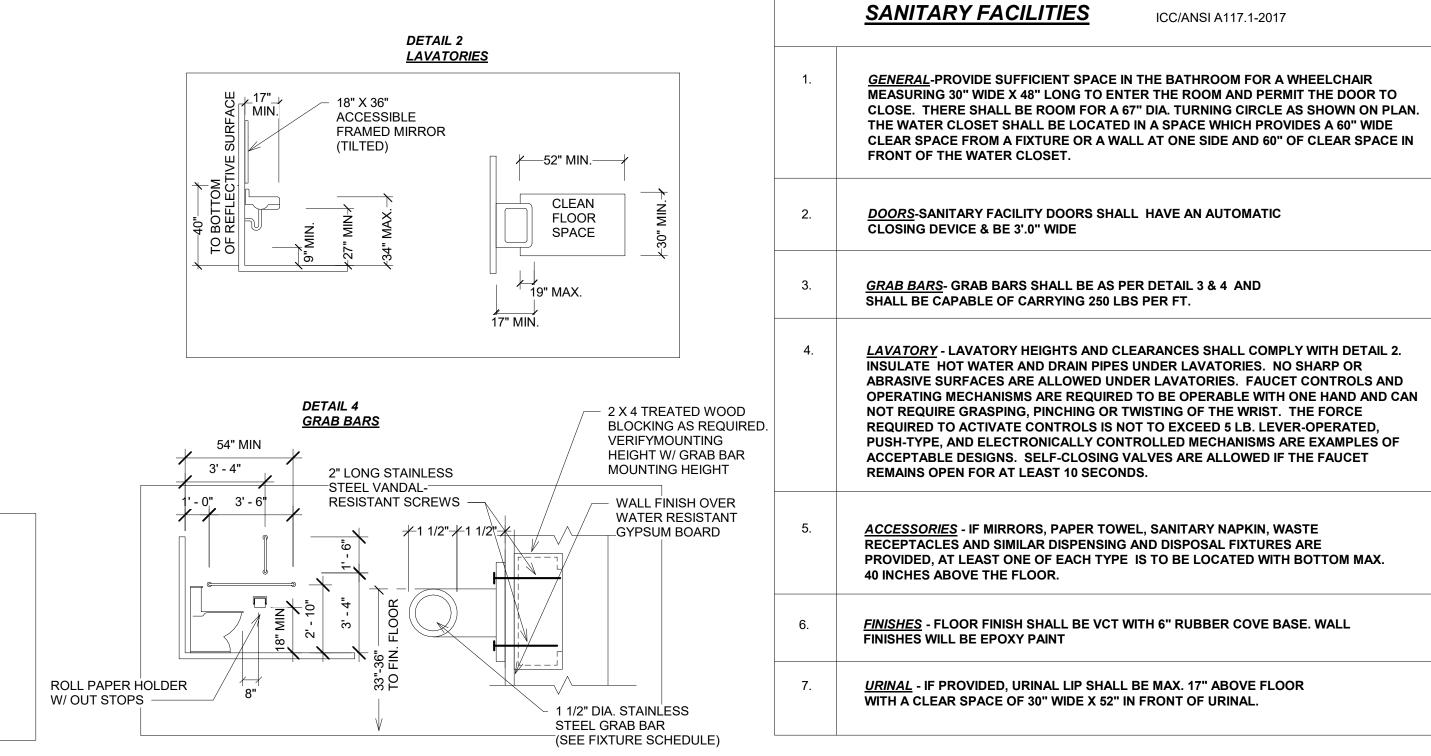
DETAIL 3 GRAB BARS

2 ADA Toilet Details 2017 1/4" = 1'-0"





1 ADA Toilet Detail 3 1/4" = 1'-0"



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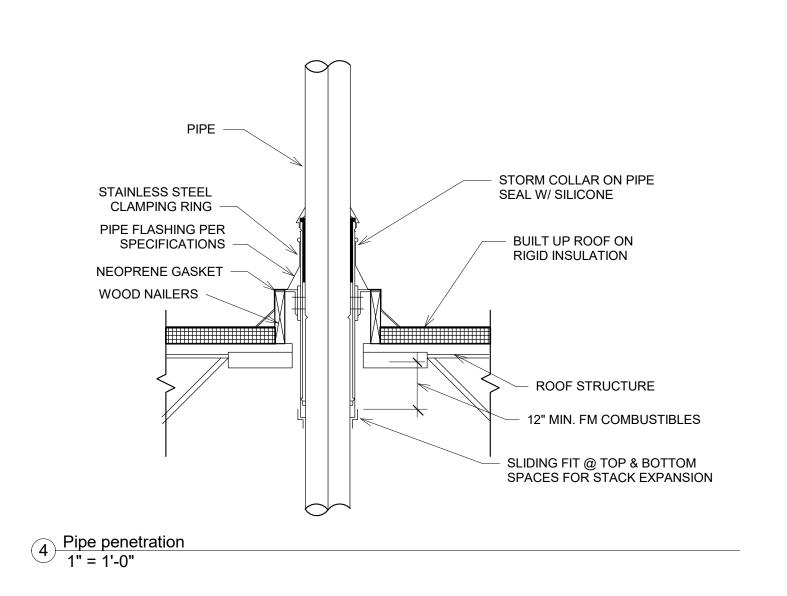


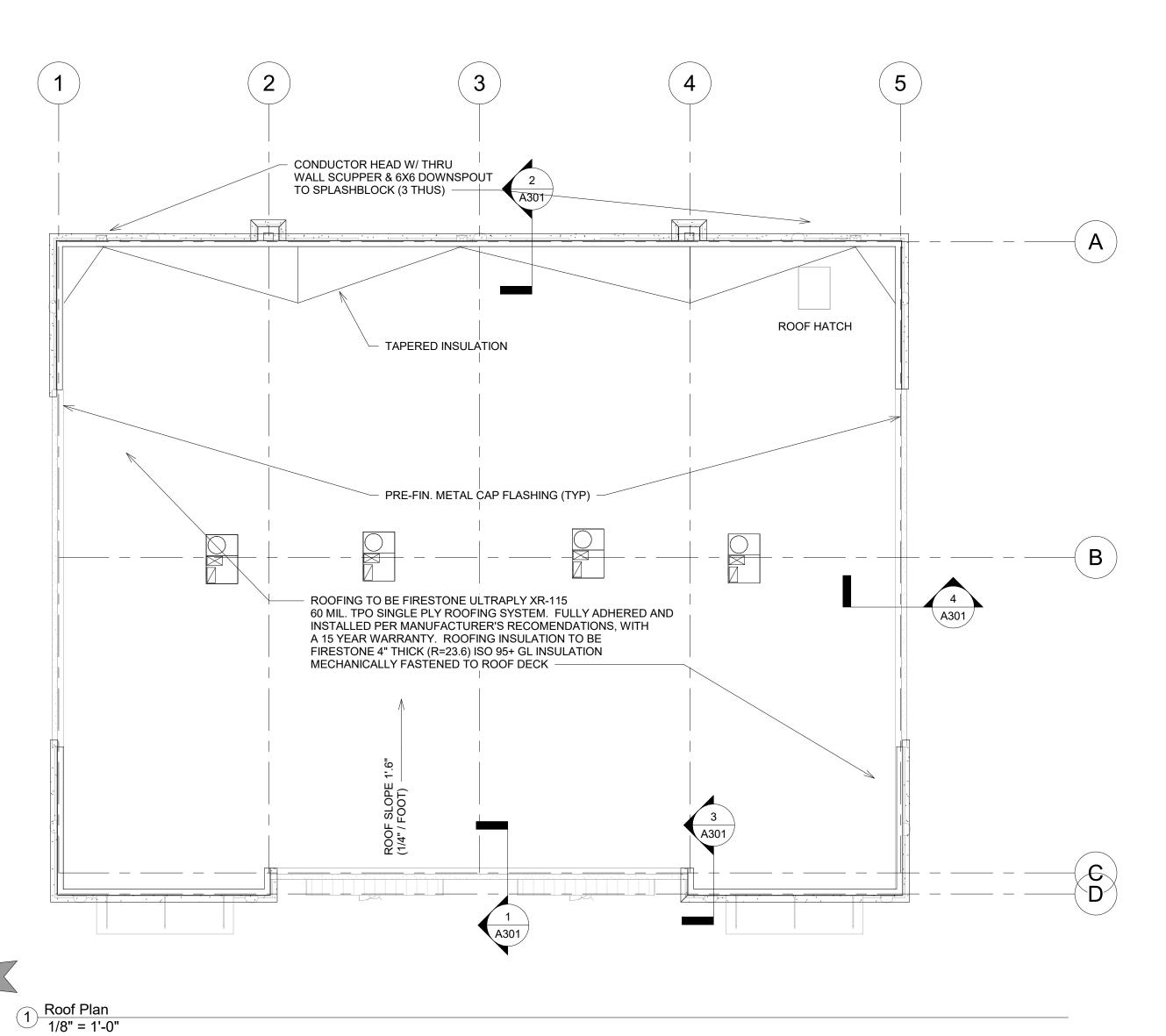
Date Description **Revision Schedule**

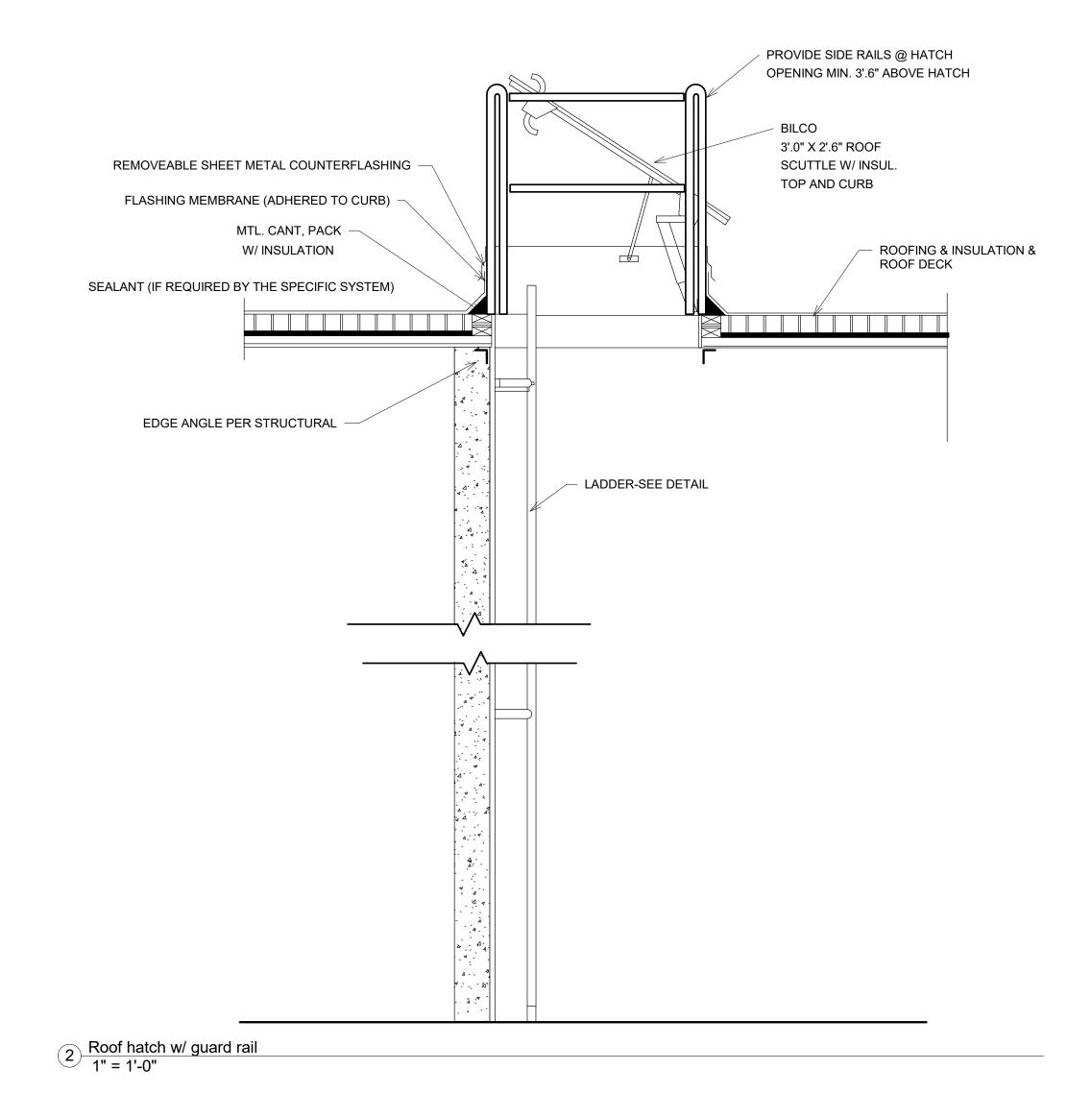
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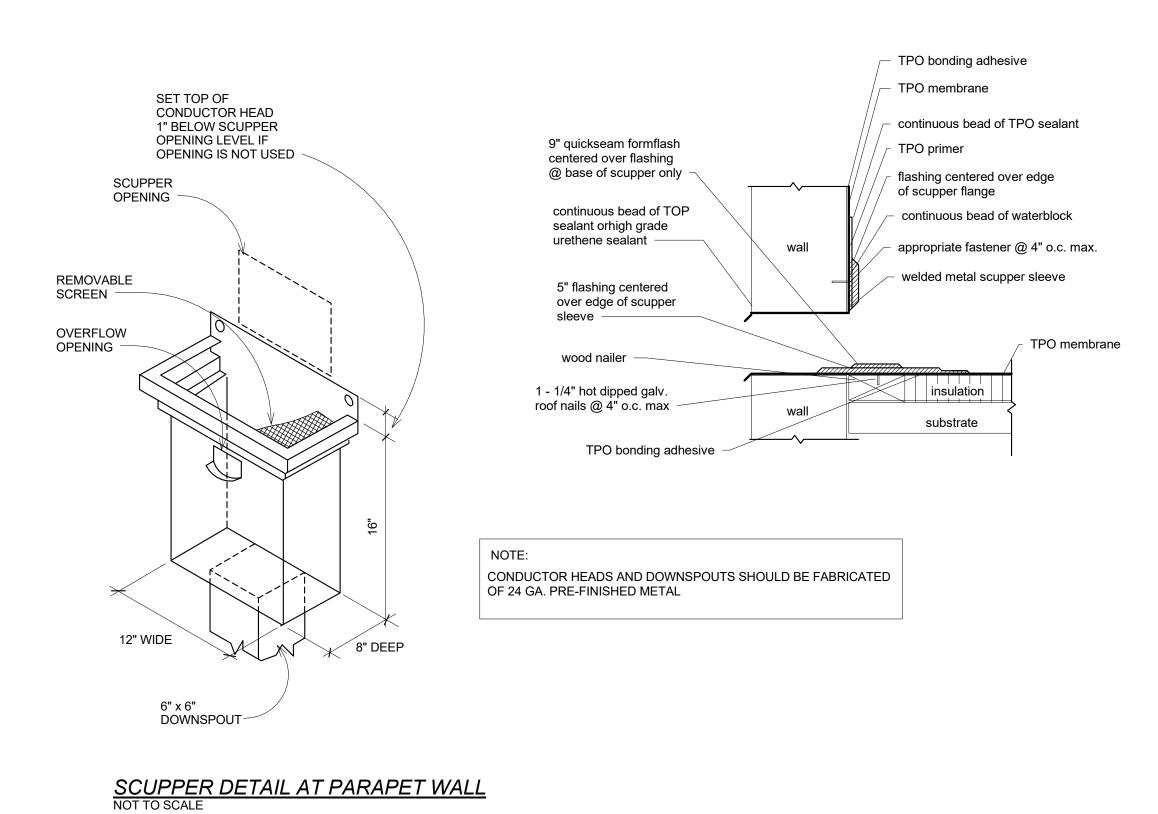
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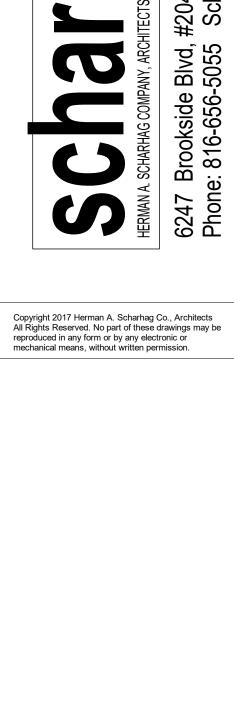
A103





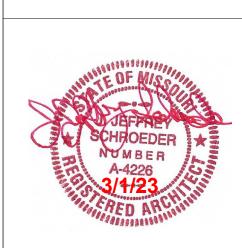






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Date Description **Revision Schedule**

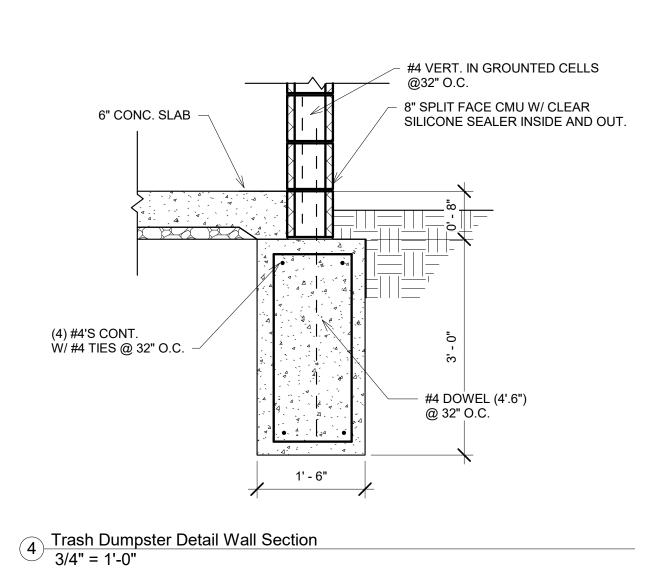
Roof Plan

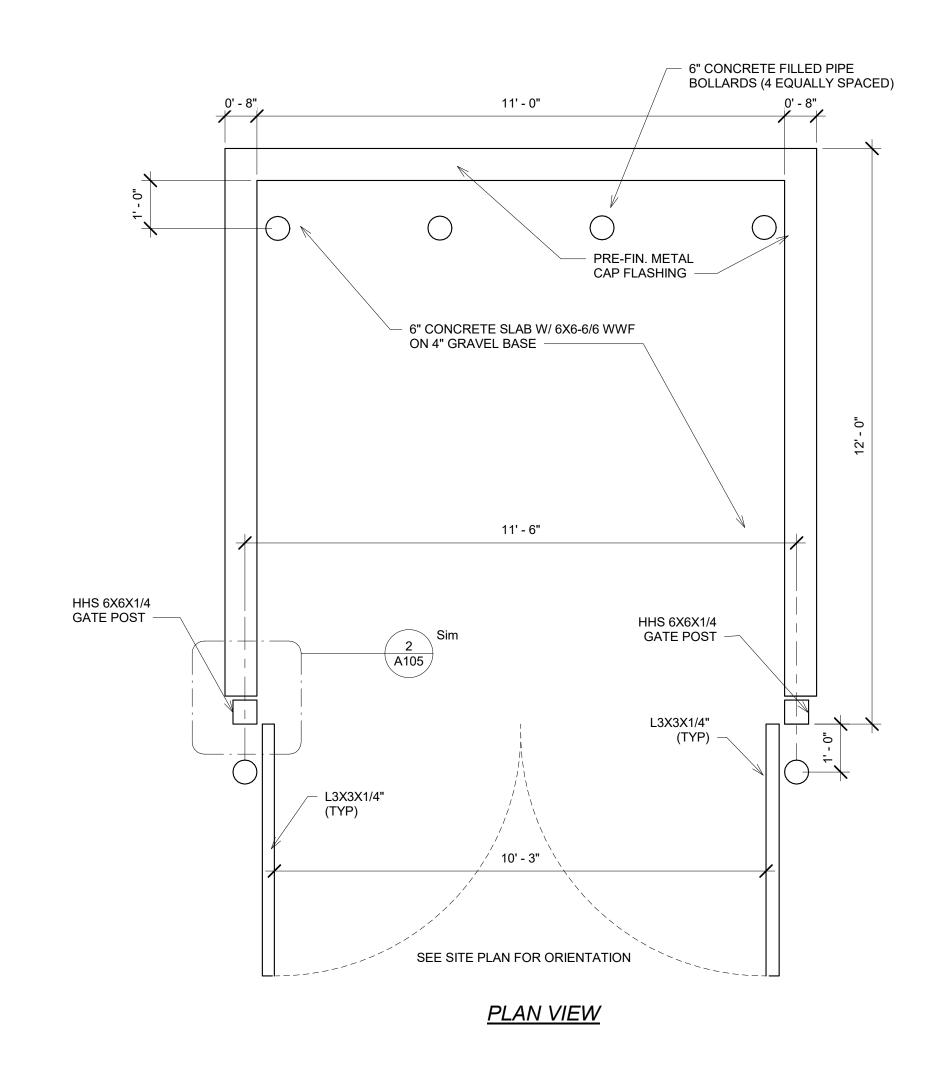
2491 Project number 03.01.2023

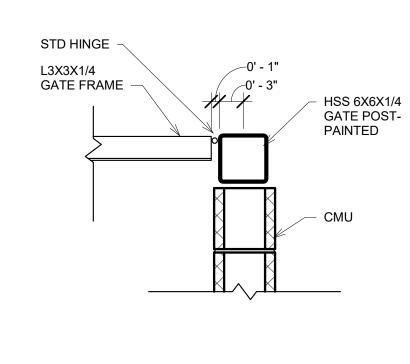
A104

As indicated

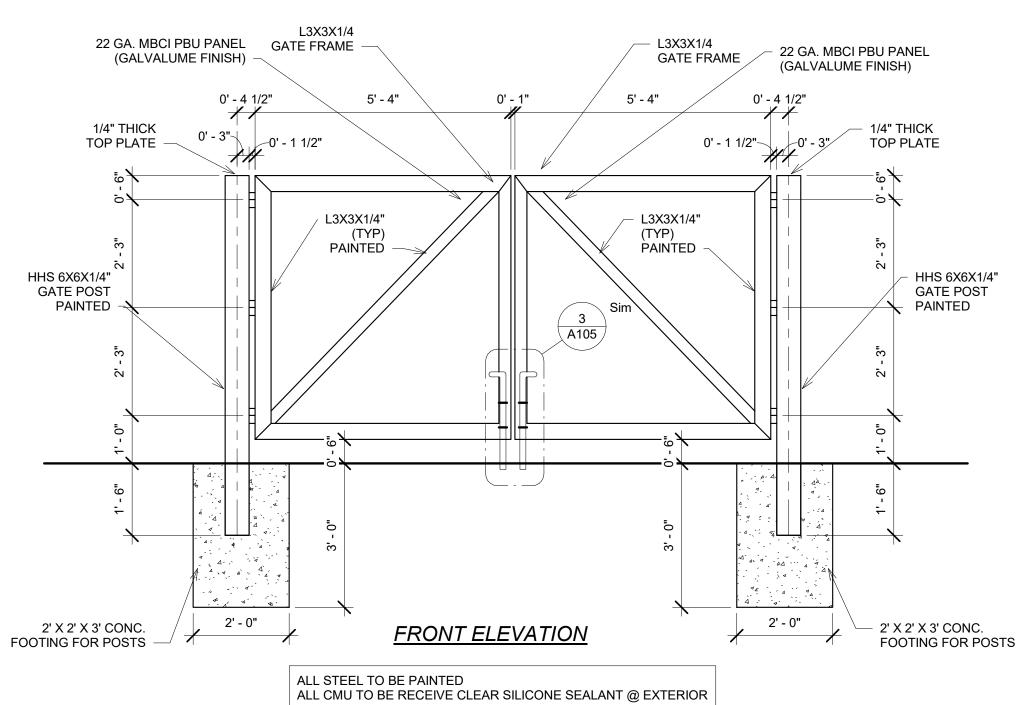
3 Scupper detail 1/2" = 1'-0"

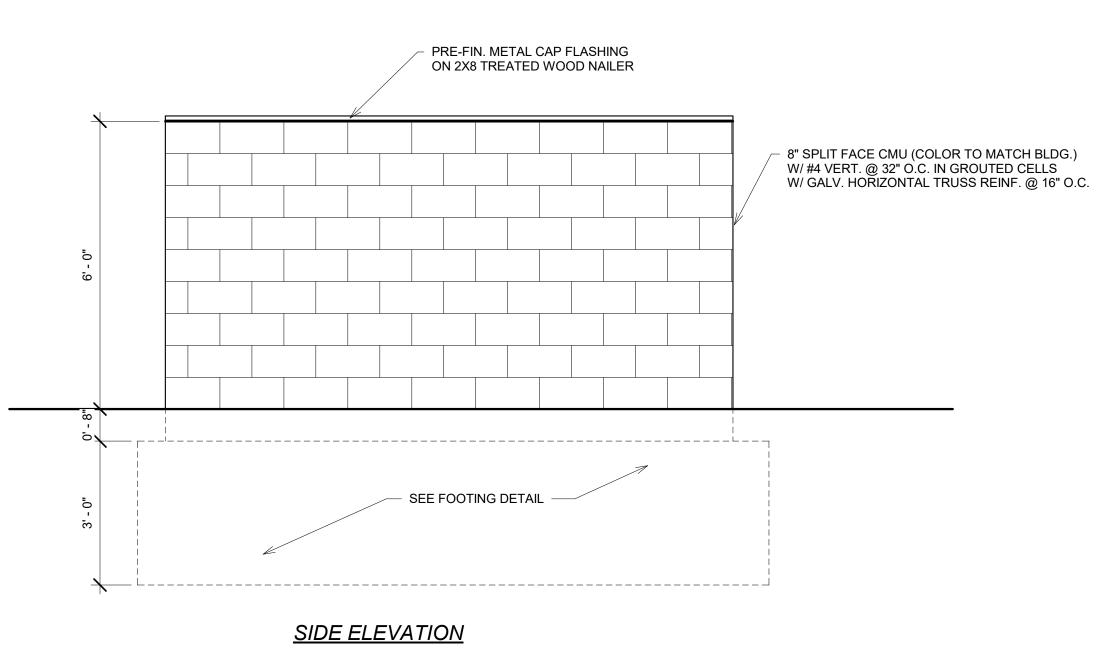


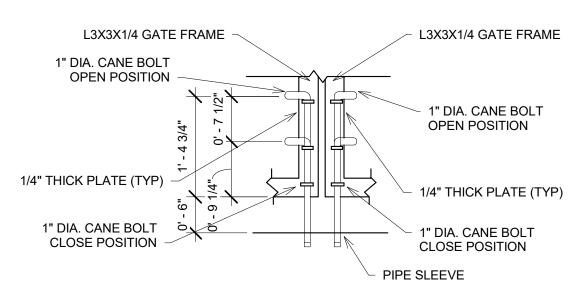




2 Hinge Detail Plan 12x11 1" = 1'-0"







3 Trash Dumpster Detail - Hinge Detail 3/4" = 1'-0"

Trash Dumpster Detail 11x12

1/2" = 1'-0"

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Description

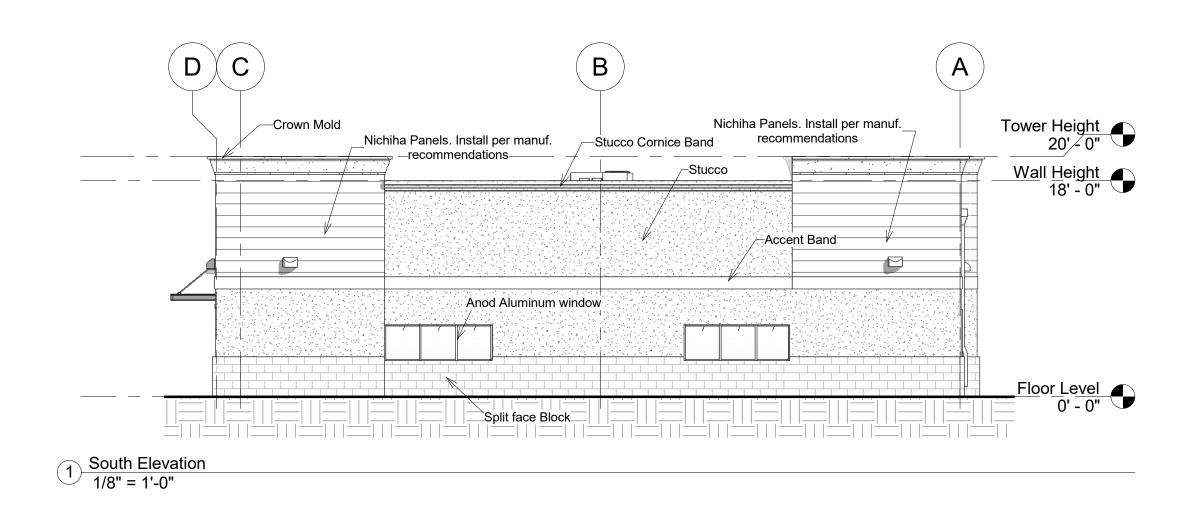
Revision Schedule

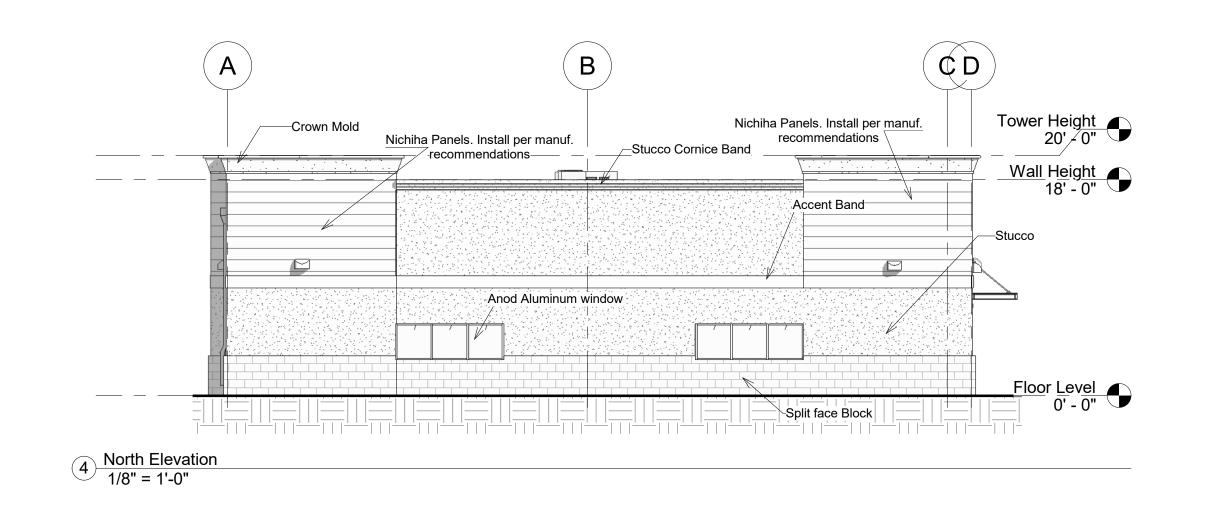
Trash Dumpster Details- 11x12

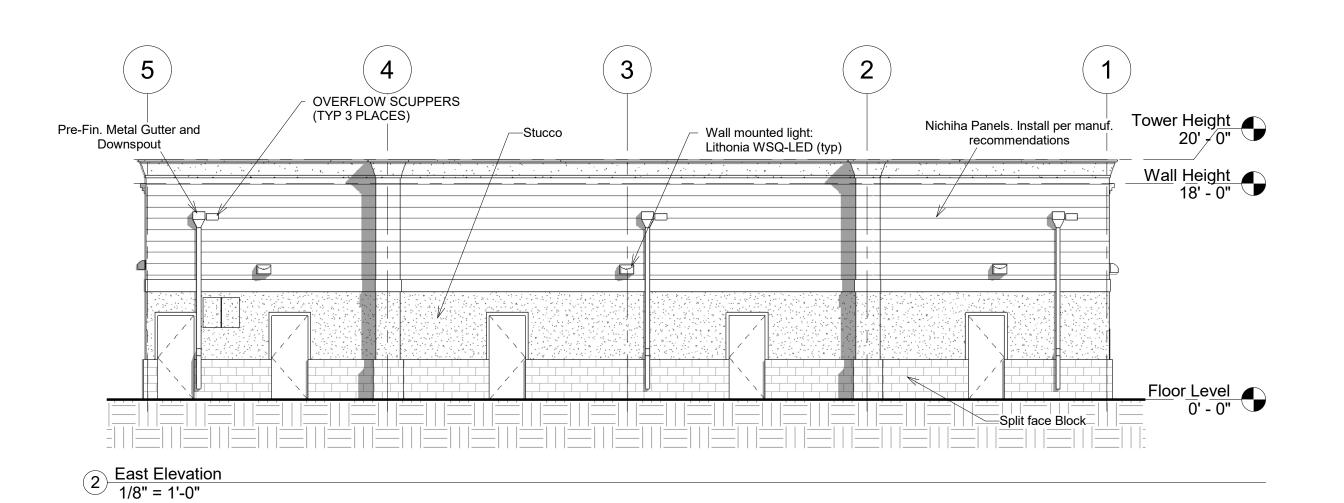
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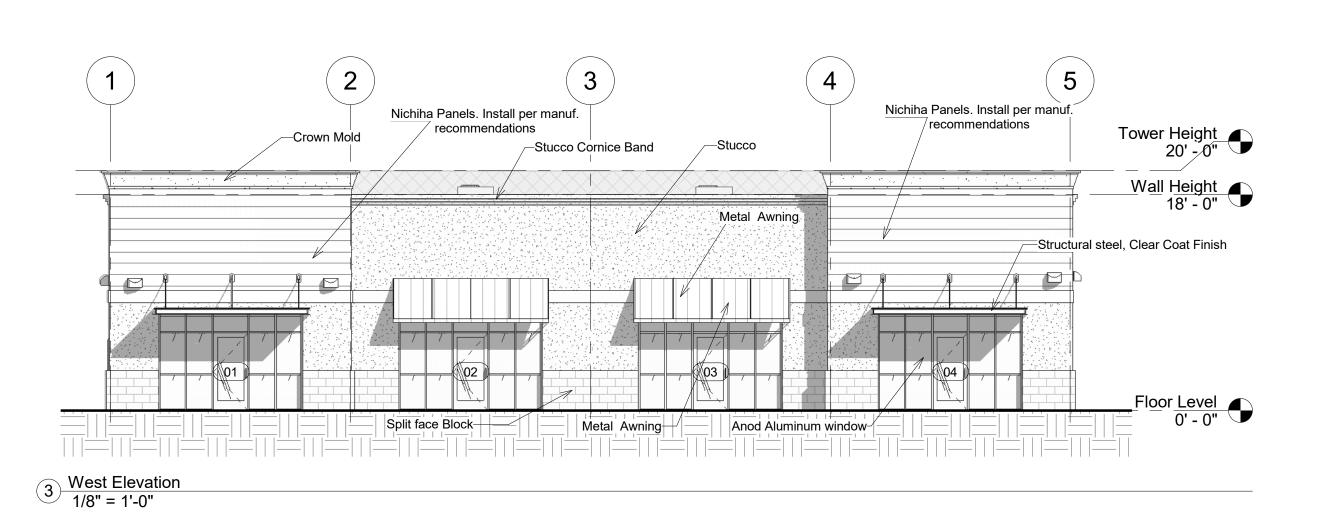
2491 03.01.2023

A105









PROVIDE CLEAR SILICONE SEALER FOR BRICK



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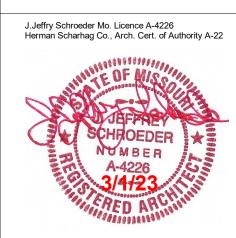
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No. Description Date

Revision Schedule

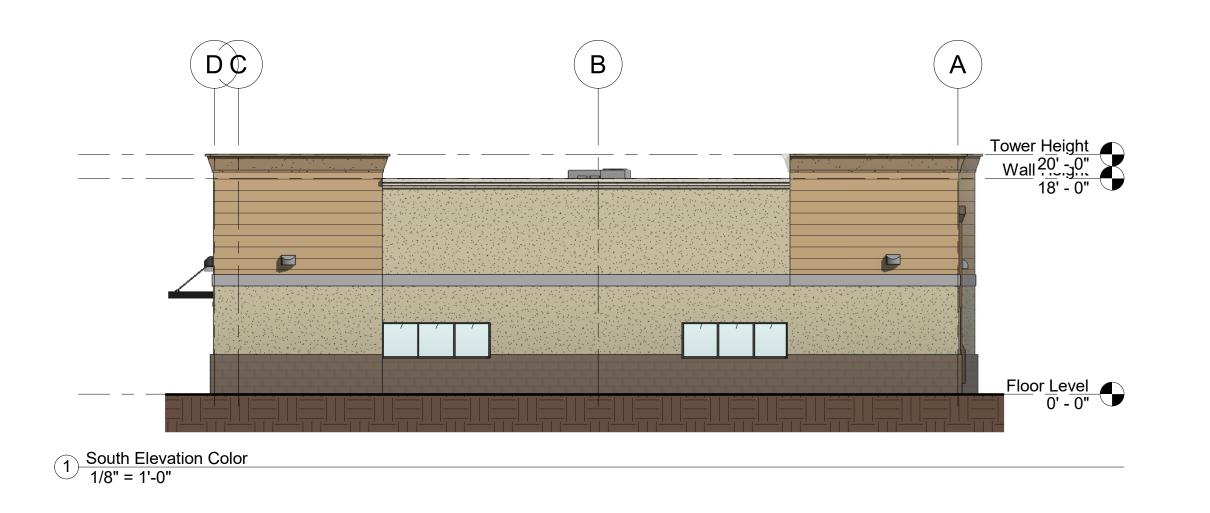
Elevations

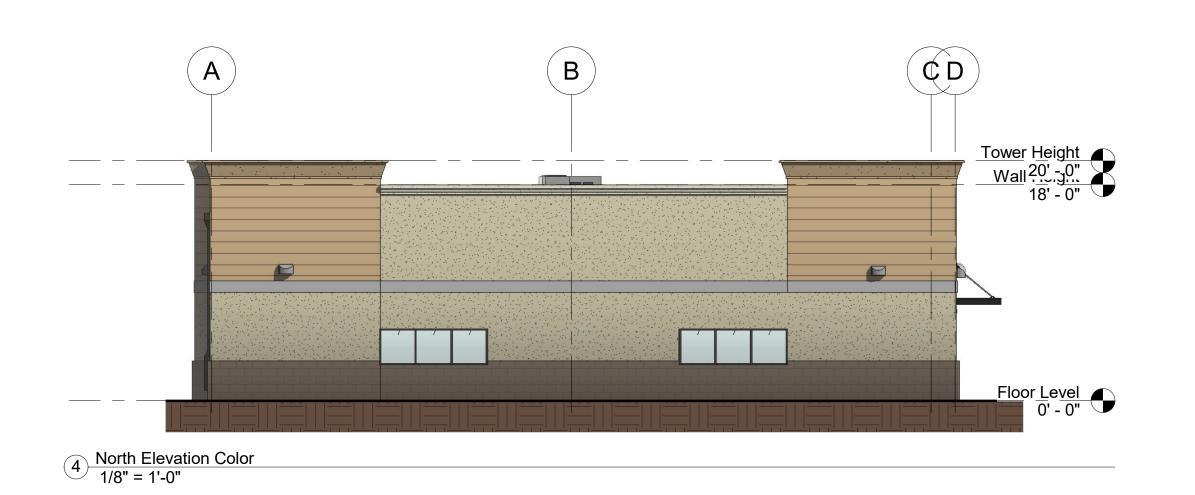
 Project number
 2491

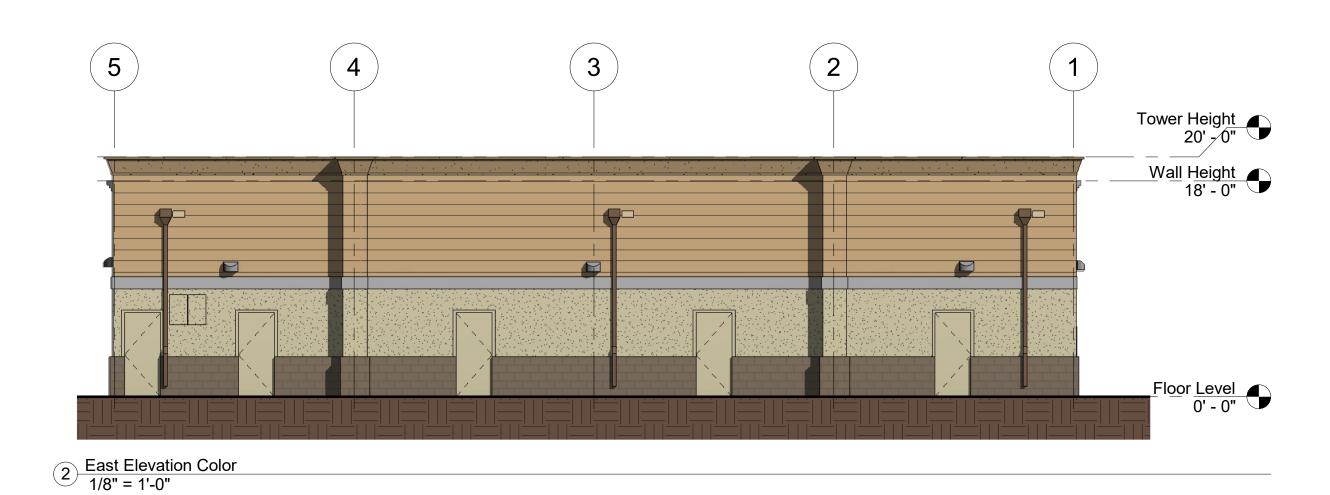
 Date
 03.01.2023

A201

1/8" = 1'-0"









#204 Kansas City, Mo 64113 Scharhagarch@gmail.com 90 6247 Brookside E Phone: 816-656-5

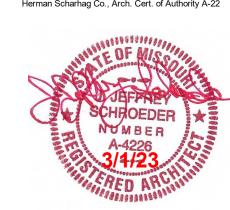
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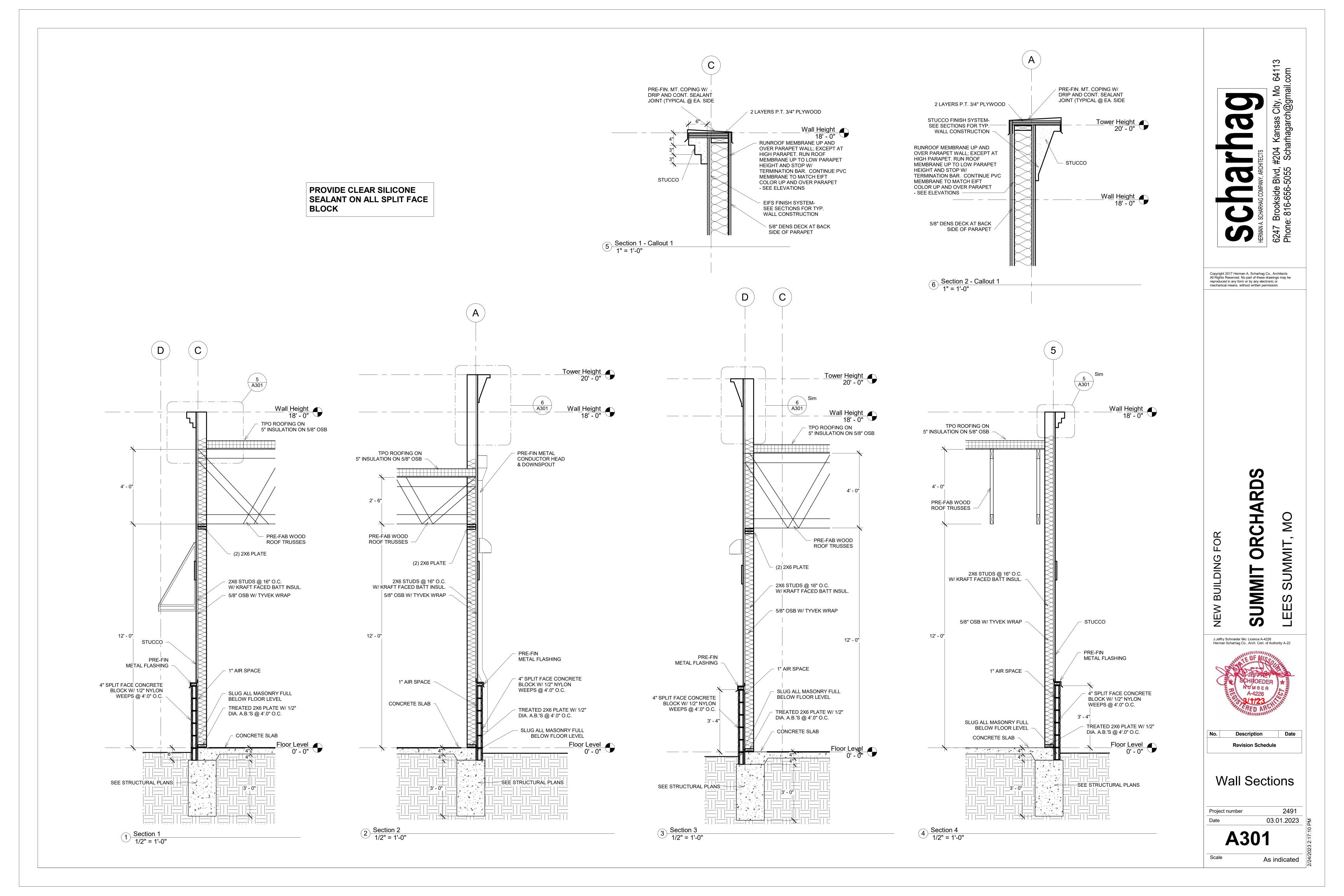
Description Date **Revision Schedule**

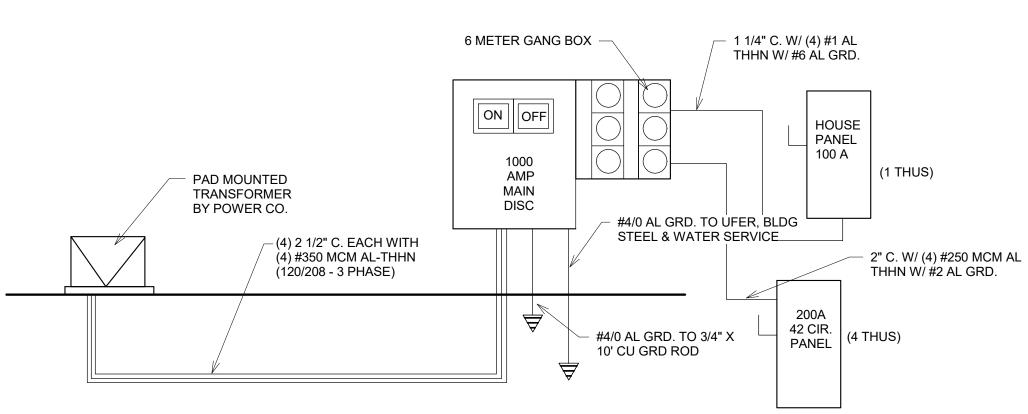
> Colored Elevations

Project number 03.01.2023

A202

1/8" = 1'-0"



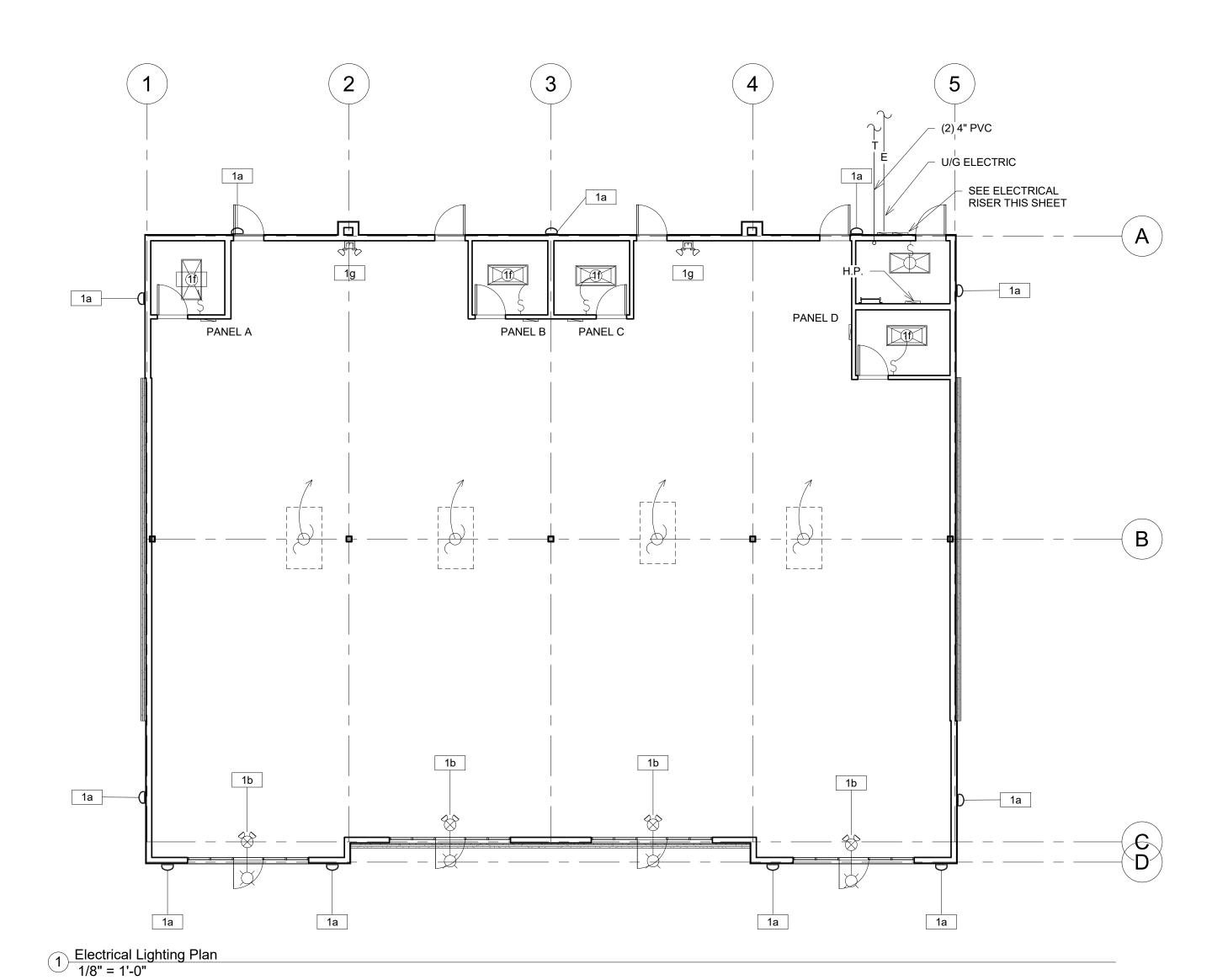


MULTI-TENANT ELECTRIC RISER

MAXIMUM ANITICIPATED LOAD = 1000 AMPS

GROUNDING AND BONDING SHALL BE IN COMPLIANCE WITH ARTICLE 250 OF THE NATIONAL ELECTRIC CODE, GROUND CONNECTION AT THE MAIN SERVICE EQUIPMENT SHALL BE MADE TO THE METALLIC WATER SERVICE AND TO A COPPER CLAD ROD 3/4" DIA. BY 10' LONG. WHEN AVAILABLE BOND TO A METAL UNDERGROUND WATER PIPE, THE METAL FRAME OF THE BUILDING, A CONCRETE ENCASED ELECTODE, GROUND RING, AND ANY MADE ELECTRODE.

AFC/AIC = 36,115 EST. AVAILABLE FAULT CURRENT. ELECTRICAL GEAR SHALL BE RATED AT 42,000 AFC/AIC



Lighting Fixture Schedule				
Type Mark	Туре	Type Comments	Count	
1a	Lithonia Exterior Wall	WSQ LED 40KP3 MVOLT DDBXD, 40W	11	
1b	Mounted LED Fixture Exit Light- Exterior	Combo exit and emergency LED light w/ remote exterior head. All with 90 min. battery backup. With remote head	4	
1f	Lithonia LED Recessed Troffer	EPANL-2X4-5400L-80CRI-40K-MIN10-ZT-MVOLT, 40 WATT	5	
1g	Emergency Light	Two sealed beam lamps, LED w/ battery backup with 90 minute miminum operation on battery, battery charger, battery test button and light. 120 volt. Wall mounted	2	

ELECTRICAL NOTES:

ALL ELECTRICAL LIGHT AND POWER WIRE SHALL NOT BE SMALLER THAN #12 AWG. ALL LIGHTING AND POWER WIRING #10 AWG AND SMALLER SHALL BE SOLID. ALL CONDUCTORS SHALL BE COPPER ONLY. NO ALUMINUM IS ALLOWED

ALL CONDUITS SHALL BE SIZED IN ACCORDANCE WITH THE LATEST NEC TABLES. MINIMUM CONDUIT SIZES SHALL BE $^3\!\!4$ ". ALL CONDUIT IN AND UNDER FLOOR SLAB SHALL BE SCHEDULE 40 PVC

ALL POWER WIRING IN ALL AREAS SHALL BE IN EMT CONDUIT, BOTH IN WALLS AND THROUGH EXPOSED JOISTS. MC CABLE AND ARMORED CABLE ARE ALSO ALLOWABLE IN AREAS WHERE CONDUITS ARE NOT EXPOSED

ELECTRICAL CONTRACTOR SHALL FURNISH, INSTALL AND CONNECT, FOR WORK DESIGNATED AS HIS RESPONSIBILITY, ALL WIRE, WIRE WAY, CONDUIT, CONNECTORS, OUTLETS, ETC. NECESSARY TO ACHIEVE A COMPLETE ELECTRICAL INSTALLATION. WHERE AN ELECTRICAL DEVICE IS REQUIRED BY CODE BUT NOT SHOWN, IT SHALL BE FURNISHED AND INSTALLED BY ELECTRICAL CONTRACTOR AS THOUGH FULLY SHOWN AND SPECIFIED. ALL LABOR, TOOLS, MATERIALS, EQUIPMENT SHALL BE PROVIDED AS NECESSARY TO PROVIDE AND INSTALL A COMPLETE SYSTEM. ALL WORK SHALL BE PER CURRENT CODE. COORDINATE ALL WORK WITH OTHER TRADES

ELECTRICAL CONTRACTOR SHALL CIRCUIT FIXTURES AND SHALL PROVIDE AND INSTALL CIRCUIT DIRECTORY WITH TYPED CIRCUIT DESIGNATION CARD UNDER PLASTIC COVER ON THE INSIDE OF EACH PANEL DOOR. ELECTRICAL CONTRACTOR SHALL ALSO FURNISH AND INSTALL NAMEPLATES ON ALL DISCONNECT SWITCHES AND PANEL BOARDS

ALL CONDUIT, JUNCTION BOXES, ETC. ABOVE CEILINGS SHALL BE SUPPORTED FROM STRUCTURE

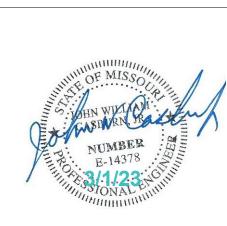
ELECTRICAL CONTRACTOR SHALL PROVIDE ALL POWER WIRING, ALL CONTROL WIRING AND ALL STARTERS, DISCONNECTS AND THERMAL OVERLOAD SWITCHES NOT SUPPLIED WITH THE EQUIPMENT

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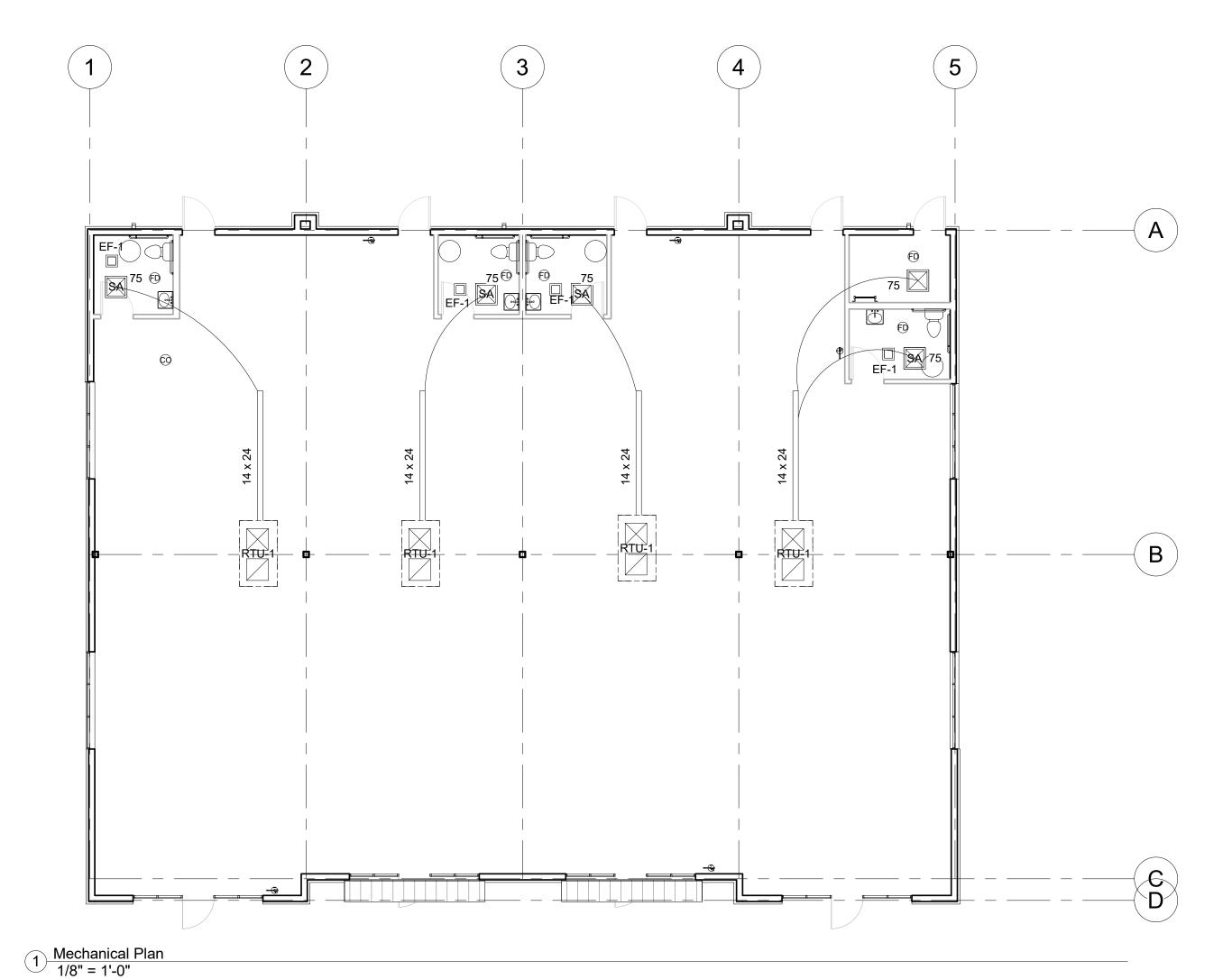
Revision Schedule

Electrical

 Project number
 2491

 Date
 03.01.2023

E1



Mechanical Equipment Schedule				
Type Mark	Туре	Type Comments	Count	
EF-1	75 CFM Exhaust Fan	Broan ceiling mounted exhaust fan rated at 75 CFM. Provide 4" dia. duct through roof with weatherhood and birdscreen. switch with lights.	4	
RTU-1	New 5 Ton RTU	Trane 5 Ton RTU. Electric cooling and gas heat 1,950 CFM w/ roof curb, economizer, and programable thermostat. 115,000 BTU. 12.6 IEER.	4	
SA	24" x 24"Supply	As Located per plans	5	

HVAC NOTES

MAIN DUCTWORK SHALL BE STEEL GALVANIZED SEALED AIR TIGHT.

SHEET METAL GUAGES SHALL BE PER SMACNA AND NO LESS THAN 24 GA. INSULATED DUCTS WITH ½" - 3# INSULATION. DO NOT LINE TOILET/SHOWER EXHAUST DUCTS.

GRILLES AND DIFFUSERS SHALL BE TITUS, TUTTLE & BAILEY OR EQUAL. SEE ARCHITECTURAL OR ELECTRICAL DRAWINGS FOR CEILING GRID. ALL SHALL BE 4-WAY.

FLEX BRANCH CONNECTIONS SHALL HAVE INSULATED FLEX DUCT, SPIN COLLARS WITH ADJUSTABLE DAMPER AND 90 DEGREE ELL AT DIFFUSER TO PREVENT KINKS, IN BOTH SUPPLY AND RETURN.

COORDINATE ALL WORK WITH OTHER TRADES. ALL WORK SHALL COMPLY WITH CURRENT BUILDING CODE LISTED IN THE CODE ANALYSIS. ENTIRE SYSTEM SHALL BE TESTED AND BALANCED AT COMPLETION OF WORK.

ALL FLUES FROM GAS FIRED EQUIPMENT SHALL BE TYPE B DOUBLE METAL WALL TYPE WITH GALVANIZED EXTERIOR SHELL

AND ALUMINUM INTERIOR LINER AS MANUFACTURED BY METALBESTOS OR EQUAL. ALL FLUES SHALL BE KEPT AT LEAST 1" FROM COMBUSTIBLE MATERIALS.

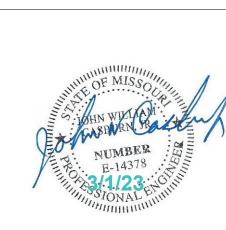
FLEX DUCT SIZES (MAX. 8' RUN)

500 – 600 CFM 12" DIA. FLEX 400 CFM 10" DIA. FLEX 300 – 200 CFM 8" DIA. FLEX 100 – 150 CFM 6" DIA. FLEX

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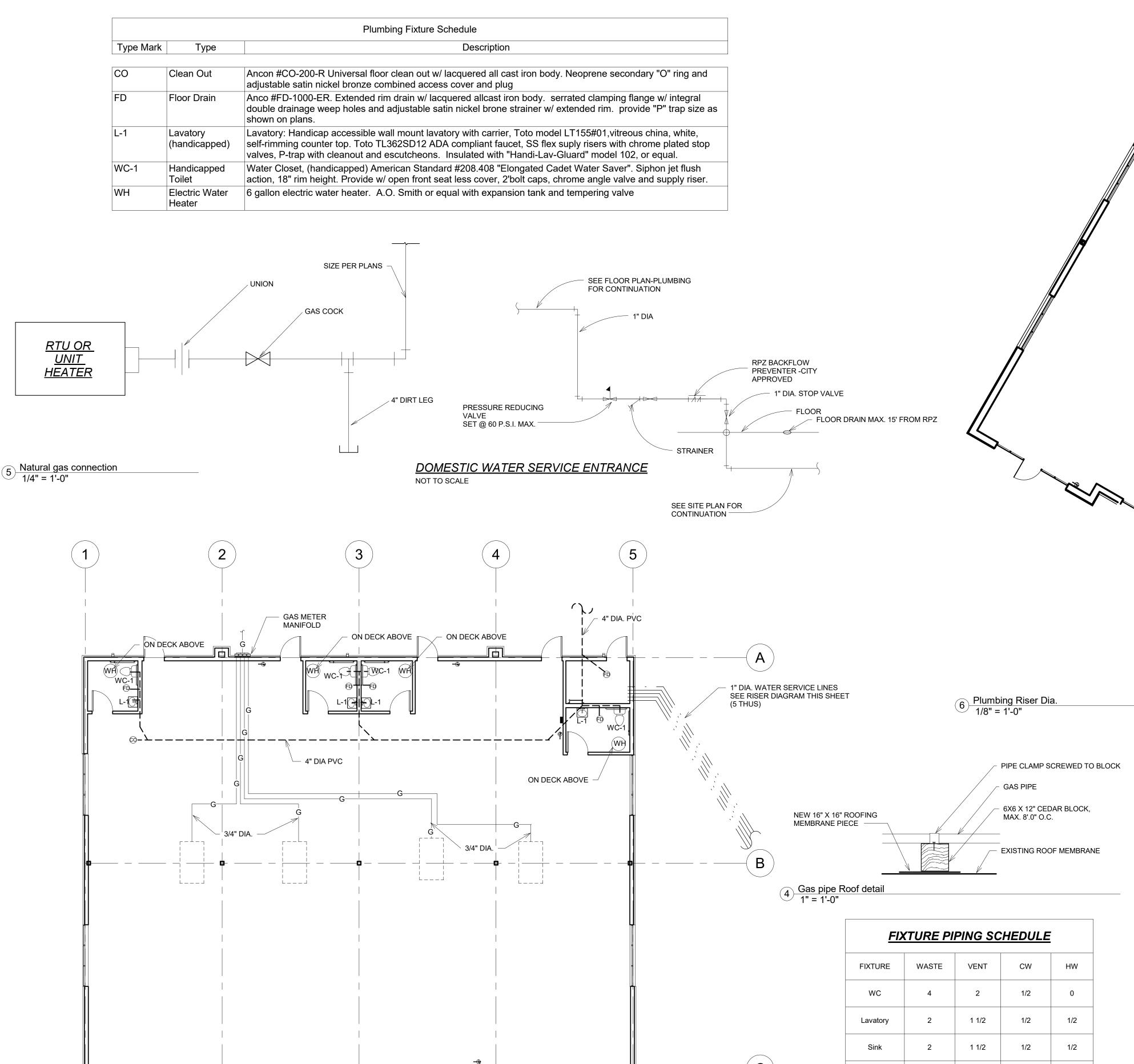


Description **Revision Schedule**

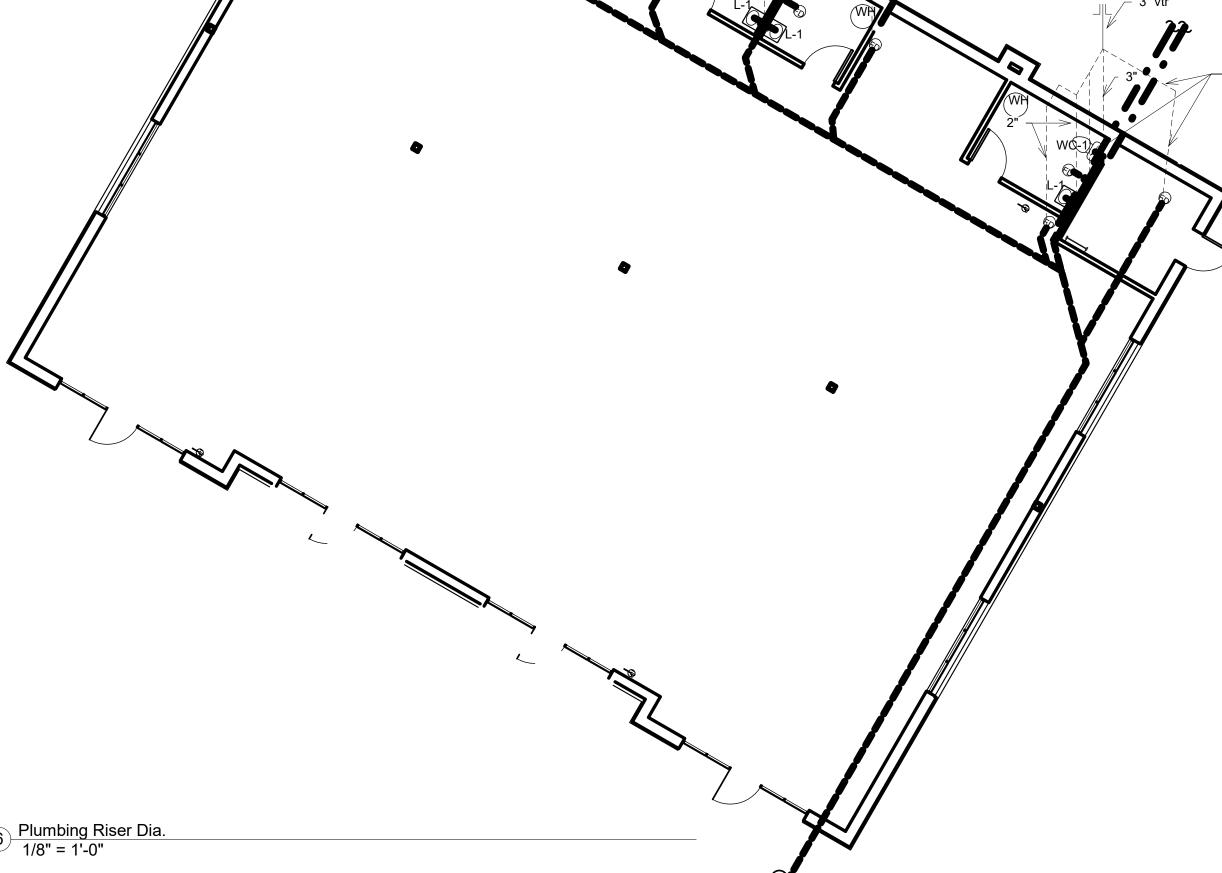
Mechanical

Project number 03.01.2023

1/8" = 1'-0"



1 Plumbing Plan 1/8" = 1'-0"



PLUMBING NOTES:

PIPING DRAWINGS ARE SCHEMATIC ONLY. PLUMBING CONTRACTOR TO DETERMINE EXACT ROUTING AND LOCATIONS OF ALL PIPING ON JOB SITE IN COMPLETE COORDINATION WITH ALL OTHER TRADES INVOLVED. HE SHALL ALSO VERIFY EXACT FLOOR PLAN LAYOUT, FIXTURE LOCATIONS, STRUCTURAL CONDITIONS AND ALL DIMENSIONS ON ARCHITECTURAL DRAWINGS.

PROVIDE ALL FIXTURES SHOWN ON THE DRAWINGS, COMPLETE WITH HOT AND COLD WATER, WASTE AND VENT CONNECTIONS AS REQUIRED. EACH FIXTURE SHALL HAVE SHUTOFF VALVES FOR HOT AND COLD WATER. HOT AND COLD WATER LINES TO HAVE WATER HAMMER ARRESTOR CONFORMING TO ASSE 1010. PIPING SHALL BE INSTALLED PROPERLY TO ELIMINATE CROSS CONTAMINATION OR SIPHONING OF WASTE MATERIAL INTO THE SUPPLY WATER SYSTEM. PIPING SHALL BE PITCHED TO VENT AND/OR DRAIN. VERIFY EXACT LOCATIONS AND REQUIREMENTS BEFORE BEGINNING THE INSTALLATION.

ALL VENTS SHALL BE INCREASED TO A MIN. OF 3" BEFORE PASSING THROUGH THE ROOF.

THOROUGHLY CLEAN ALL ITEMS BEFORE INSTALLATION. CAP PIPE OPENINGS TO EXCLUDE DIRT UNTIL FIXTURES ARE INSTALLED AND FINAL CONNECTIONS HAVE BEEN MADE. SET FIXTURES LEVEL AND IN PROPER ALIGNMENT. INSTALL SILICONE SEALANT BETWEEN FIXTURES AND ADJACENT MATERIAL FOR SANITARY JOINT.

TEST WATER SYSTEM UNDER 150 PSIG HYDROSTATIC PRESSURE FOR FOUR HOURS MINIMUM. ALL WORK SHALL BE IN ACCORDANCE WITH CURRENT CODE.

PIPING MATERIALS:

1 1/2

1 1/2

1 1/2

1 1/2

1 1/2

Urinal

EWC

Shower

FD

Hose Bib

3/4

1/2

3/4

3/4

3/4

DOMESTIC WATER BELOW GRADE: TYPE 'K' SOFT TEMPER COPPER WITH FLARE FITTING CONNECTIONS, EXCEPT NO FITTINGS TO BE USED BELOW FLOOR SLAB. USE LONG RADIUS BENDS ONLY.

DOMESTIC WATER BELOW SLAB: TYPE 'K' SOFT TEMPER COPPER WITH FLARE FITTING CONNECTIONS, EXCEPT NO FITTINGS TO BE USED BELOW FLOOR SLAB. USE LONG RADIUS BENDS ONLY.

DOMESTIC WATER ABOVE SLAB: TYPE 'L' HARD TEMPER COPPER WITH SWEAT SOLDER CONNECTIONS. USE NO-LEAD TYPE SOLDER. PEX MAY BE USED IF ALLOWED BY JURISTICTION.

ALL WATER LINES ABOVE SLAB SHALL BE INSULATED WITH EXPANDED CELL OR MOLDED SECTIONAL FIBEROUS GLASS WITH FACTORY APPLIED UL LISTED VAPOR BARRIER JACKET. FLAME SPREAD FOR INSULATION SHALL BE 25 OR LESS.

SANITARY WASTE AND VENT: CAST IRON NO-HUB CONNECTIONS ABOVE SLAB. CAST IRON WITH SLIP CONNECTIONS BELOW SLAB.

SCHEDULE 40 PVC PIPING MAY BE USED IN ALL LOCATIONS WHERE PERMITTED BY LOCAL AUTHORITIES, HOWEVER PVC MAY NOT BE USED IN ABOVE CEILING PLENUM RETURN AREAS.

GAS PIPING TO BE TYPE 'S' SEAMLESS GRADE B SCHEDULE 40 BLACK OR ASTM A53 STEEL PIPE, TYPE 'E' ELECTRIC RESISTANT WELDED. WHERE INSTALLED BELOW GRADE, PIPE MUST BE COATED AND WRAPPED AND HAVE CATHODIC PROTECTION. ALL CAST IRON PIPE THAT IS OVER 3" DIAMETER AND NOT EXPOSED, MUST BE WELDED PIPE

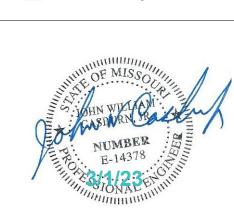
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Revision Schedule

Plumbing

 Project number
 2491

 Date
 03.01.2023

P10

GENERAL NOTES

A. **GENERAL**

- 1. These notes shall be read in conjunction with the Specifications and the Drawings. In the event of a conflict, notify the Architect for clarification.
- 2. Before executing anything herein shown, examine actual job conditions. Report any discrepancy, dimensional or otherwise, between architectural and structural Drawings and any other error, omission, or difficulty affecting the work to the
- Architect and to the Structural Engineer for review. 3. The Owner or his Representative reserves the right to inspect any material, fabrication, or workmanship at any time in field or shop for conformance to the Specifications and Drawings.
- 4. All details and sections are intended to be typical and shall be construed to apply to any similar situation elsewhere, except where a different detail is shown.

B. <u>DESIGN</u>

- 1. Codes, specifications and standards (latest editions, U.N.O.)
- a. All design and construction shall conform to the International Building Code (currently adopted edition) as amended and adopted by the City of jurisdiction. b. All construction shall comply with the provisions of the following
- codes, specifications and standards, except where noted to the contrary on drawings and specifications or where more stringent requirements are specified or shown:
- ACI 117 "Standard Specifications for Tolerance for Concrete Construction and Materials"
- ACI 301 "Specifications for Structural Concrete for Buildings" "Building Code Requirements for Reinforced Concrete"
- "Building Code Requirements for Masonry Structures" ACI 530 "Load and Resistance Factor Design (LRFD) Specification for AISC Structural Steel Buildings"

50 psf

- "Steel Deck Manual for Floor Decks and Roof Decks" AWS D1.1 "Structural Welding Code - Steel"
- Design Loads:
- a. Roof Snow (incl. rain on snow) - Pf = 20 psf
- Ce = 1.00-I = 1.00
- -Ct = 1.00b. Wind
- Basic Wind Speed = 115 mph
- -I = 1.00- Wind Exposure B
- Internal Pressure Coefficient = 0.3 d. Floor Live Load - Office
- Entrances (exits), stairs 100 psf - Light Storage 125 psf - Heavy storage 250 psf
- e. Canopy Roof Design Dead Loads: Roof Panels 30 psf - Steel Framing - Roofing
- Total 3. Foundations are designed for the following net allowable bearing capacities: a. Isolated Footings:
- b. Continuous Footings: 2 ksf 4. Foundations and retaining walls have been designed for an equivalent fluid pressure of 100 pcf.

C. <u>CONCRETE</u>

- 1. Concrete used in the Work shall have the following minimum 28-day ultimate compressive strengths: a. Columns 4000 psi
- b. Retaining walls, slabs on grade, and footings 4000 psi c. Framed slabs
- Air entrain all exterior concrete (admixture: ASTM C 260). Do not use calcium chloride admixtures under any circumstances.
- 4. Reinforcing bars: ASTM A 615 Specifications, Grade 60, deformed. Bend
- Welded wire fabric (WWF): ASTM A 185.
- Maintain minimum concrete coverage for reinforcing as indicated, unless noted otherwise. Reference details 17/S1.0 and 18/S1.0 for placement of reinforcement in typical framed slabs.
- a. 3 in. clear where concrete is deposited directly against earth. b. 2 in. clear where concrete is exposed to earth or weather but poured against
- forms for bars larger than #5. c. 1-1/2 in. clear where concrete is exposed to earth or weather, but
- poured against forms for bars #5 or smaller.
- d. 3/4 in. clear for slabs and walls formed above grade not exposed to weather. e. 1-1/2 in. clear for beam and columns formed above grade and not exposed to
- 7. Lap all bars at splices in accordance with ACI 318, unless specifically noted otherwise.
- 8. Top and bottom bars in continuous grade beams shall run continuous through multiple spans, where possible. Otherwise, top bars shall splice within the middle 1/3 span and bottom bars shall splice over supports. 9. Pour columns, walls, and pilasters to be monolithic.
- 10. All concrete walls shall be properly braced and held in line until supporting slabs
- or floors are in place. 11. All bar steel and WWF shall be properly supported and held accurately in place as recommended by the Concrete Reinforcing Steel Institute, except that maximum
- spacing of any bar or mesh support shall be 3 feet. a. Support top slab bars with continuous high chairs.
- b. Support beam bars on heavy beam bolsters. c. Support footing and grade beam bottom reinforcing on concrete bricks,
- concrete blocks, or mounds of poured concrete. d. Support WWF in slab-on-grade properly at the mid-depth of the slab. Hooking
- and pulling up mesh after concrete has started to take its initial set is e. Supports for reinforcement for exposed-to-view concrete surfaces shall have

2 hrs 1 1/2" cover

3/4" cover

2 hrs

- legs that are in contact with forms plastic protected (CRSI, Class 1) or stainless steel (CRSI, Class 2).
- 12. Where slabs-on-grade make an abrupt change in direction, such as at doors and corners or ends of walls, provide 2-#4 by 4 feet across the reentrant corner.
- 13. Provide the following minimum concrete cover for fire rating: Interior load bearing walls and columns 2 hrs 11/2" cover Concrete beams 2 hrs 1/2" cover

D. MASONRY

- 1. Concrete masonry units (CMU): ASTM C 90, lightweight units (105 pcf or less), with the minimum net area compressive strength of 2200 psi. 2. Mortar: Portland cement and lime, and proportioned in accordance with
- ASTM C 270 for the following types: Type N - for all walls above grade

Concrete joists

Floor slab

- Type S for all walls below grade, in contact with earth 3. f'm = 1500 psi.
- Provide mortar bed on webs between grouted cells and hollow cells.
- Grout: ASTM C 476, 3000 psi minimum 28-day compressive strength. Grout all vertical cells and spaces containing reinforcing bars (as detailed) bond
- Vertically reinforce walls as shown on drawings. However, if not indicated on the drawing, reinforce wall as indicated below, at each corner, at ends of 48 inches horizontally throughout the wall, of walls, each side of control joints and openings, and at a maximum spacing unless noted otherwise. 8" or 6" wall
 - (2) #612" or 10" wall

- 8. Horizontally provide continuous bond beam with 2 #5 minimum for 12" or 10" CMU; 1 #5 minimum for 8" or 6" CMU at floor/roof, near midheight (10'-0 maximum spacing) and top of wall, unless noted otherwise. Provide #5 corner bar for each horizontal bond beam corners.
- 9. Place reinforcement prior to grouting. Hold vertical reinforcement in position with
- rebar positioner. 10. Provide horizontal joint reinforcement as indicated on the drawings and
- specifications, at a minimum provide at 16"o.c. 11. Lap joint reinforcement a minimum of 12 in.
- masonry has hardened sufficiently to carry its own weight and all other reasonable temporary loads that may be placed on it during construction.
- 13. Do not wet concrete masonry units.
- 14. Do not use calcium chloride.
- 15. Do not use masonry cement. 16. Keep masonry walls shored during construction until the roof deck and floor slabs are in place to provide lateral stability.

12. In no case shall shores and forms at lintels be removed until it is certain that the

E. <u>STEEL</u>

- 1. Qualifications for Welding Work:
- a. Perform all welding by a certified welder. Qualify welding processes and welding operators in accordance with AWS
- "Standard Qualification Procedure". c. Provide certifications that welders to be employed in work have satisfactorily passed AWS qualification tests within previous 12 months.
- d. If recertification of welders is required, retesting will be Contractor's responsibility.
- 2. Erector must examine areas and conditions under which structural steel work is to be installed, and notify Contractor in writing of conditions detrimental to proper and timely completion of Work.Do not proceed with work until unsatisfactory conditions have been corrected in a manner acceptable to the Erector.
- 3. Submit shop drawings prepared under supervision of a registered professional engineer,including complete details and schedules for fabrication and assembly of structural steel members procedures and diagrams. Include details of cuts, connections, camber, holes, and other pertinent data. Indicate welds by standard AWS symbols, and show size, length, and type of each weld. Show size and type of bolt for all bolted connections.
- 4. Provide setting drawings, templates, and directions for installation of anchor bolts and other anchorages to be installed by others.
- 5. Paragraph 4.2.1 of the (AISC) "Code of Standard Practice for Steel Buildings and Bridges" is hereby modified by deletion of the following sentence: "This approval constitutes the owner's acceptance of all responsibility for the design adequacy of any detail configuration of connections developed by the fabricator as a part of his
- preparation of these shop drawings." 6. If required cut edges of backing strips, extension bars, or run-off plates flush with
- edge of abutting parts. Where framing members and/or connections for steel stairs are not indicated on either structural or architectural drawings, Design the members and/or connections and submit calculations or supporting data to verify their adequacy.A live load of 125 psf shall be used in the design. Fully detail stair connections,
- including attachments to supporting members. 8. Structural steel: ASTM A 572 - wide flange sections, ASTM A 36 - angles, channels, and plates, ASTM A 501 - pipes, and ASTM A 500, Grade B - tubes.
- 9. High Strength Bolts (steel-to-steel connections): ASTM A 325N, with twist-off load indicator type heads.
- 10. Anchor bolts: ASTM A 307, sizes indicated are based on preliminary reactions and
- 11. Welded connections: AWS Standards and Specifications using E70xx electrodes, unless noted otherwise.
- 12. Expansion Bolts: Stud type expansion anchors...(Hilti Kwik Bolt II). 13. Injection Adhesive: Hilti Dowelling Anchor (HY-150); Rawl/Sika
- Foil-Fast; Ramset/Redhead Epcon Ceramic 6. 14. Drill holes for anchors using a bit incapable of cutting steel. Do not cut existing concrete reinforcing steel. If, while drilling, reinforcing steel is encountered, notify the Structural Engineer for approval of new location. Cleaned and patch the
- 15. Ends of beams which have copes to the extent that allowable shear or bending stress of steel is exceeded shall have web plates of sufficient size welded to the
- heam to reduce such stresses 16. Provide holes required for securing other work to structural steel framing, and for passage of other work through steel framing members, as shown on final shop
- 17. Do not flame cut holes or enlarge holes by burning.
- 18. Set structural frames accurately to lines and elevations indicated. Align and adjust various members forming apart of a complete frame or structure before permanently fastening. Perform necessary adjustments to compensate for discrepancies in elevations and alignment.
- 19. Provide temporary shoring and bracing members with connections of sufficient strength to bear imposed loads.Remove temporary members and connections when permanent members are in place and final connections are made. Provide temporary guy line to achieve proper alignment of structure as erection proceeds.
- 20. Clean bearing surfaces of bond-reducing materials and roughen to improve bond to surfaces. Clean bottom surface of base plates. 21. Grout plates are prohibited. Tighten anchor bolts after supported members have
- been positioned and plumbed. Do not remove wedges or shims. but if protruding, cut off flush with edge of base plate prior to packing with grout. 22. Nonshrink grout: CRD-621 Type A, premixed, nonmetallic, noncorrosive,
- nonstaining. 23. Provide open-web joists (K-series), longspan joists (LH-series), and joist girders as indicated on the Drawings and in accordance with specifications of SJI. a. Weld K-series joists to supporting steel with 1/8 in. fillet welds in. long, each
- b. Weld LH-series joists to supporting steel with 1/4 in. fillet welds 2 in. long, each side, u.n.o.
- c. Bolt joists at or nearest a column to supporting steel in conformance with O.S.H.A.with erection bolts.
- d. Provide continuous horizontal bridging for joists (u.n.o.) and bottom chord braces for joist girders as required by SJI, except where the net uplift loading requires additional bridging.
- e. Provide horizontal bridging to resist 10psf uplift for main roof at service building and main building penthouse. f. Extend bottom cord to brace beam bottom flange at mid-span of beams in
- 24. Form deck: 9/16 in.galvanized deck with the following minimum properties:
- Minimum thickness 0.0295 Moment of Inertia 0.024 in ^4 Section Modulus 0.070 in ^3
- 25. Composite floor deck: 1-1/2 in. galvanized deck with the following minimum Minimum thickness 0.0358

side, u.n.o.

- Moment of Inertia 0.195 in ^4 Section Modulus 0.240 in ^3 26. Roof deck: 1-1/2" painted wide rib deck with the following minimum properties:
 - Minimum thickness 0.358 Moment of Inertia 0.212 in ^4 Section Modulus 0.234 in ^3
- 27. Roof deck shall be welded to supports to resist a net uplift of 20 PSF. 28. Provide 2-1/2" x 2-1/2" x 1/4" angles as required to support deck at columns,
- ends of beams, around openings, etc. Except as noted otherwise. 29. Provide 1,500 # misc. steel for use by Engineer, as needed.

E. <u>EPOXY AND MECHANICAL ANCHORS</u>

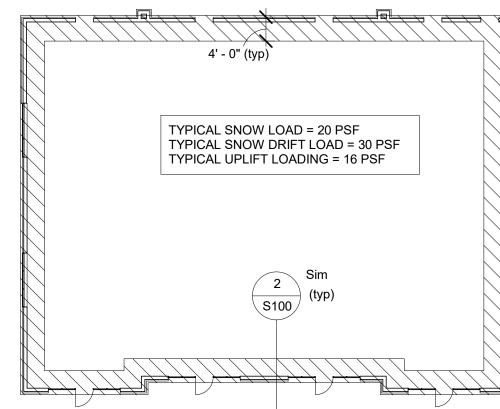
- 1. For concrete, grouted CMU, and solid masonry use Hilti HIT HY 150 two-part hybrid adhesive. For hollow CMU and masonry use Hilti HIT HY20 two-part hybrid adhesive with screen tubes. Equivalent adhesives may be used with prior
- written approval by the Structural Engineer. 2. Thoroughly clean holes with nylon brush and pressurized air per manufacturers
- instructions. 3. Drill holes to the embedment depths indicated on the drawings. If no depths are indicated, use 9 bolt or bar diameters with HY150 and 12 bolt diameters for HY 20.
- 4. "Wedge" or "Expansion" anchors shall be Hilti Kwik bolt II expansion anchors. Embed anchor 7 bolt diameters unless noted otherwise. Equivalent anchors may be substituted with prior written approval of the Structural Engineer.

F. METAL STUDS

1. Install cold-formed metal studs per drawings and manufacturer's recommendations. See Structural Plan for sizes and gauges.

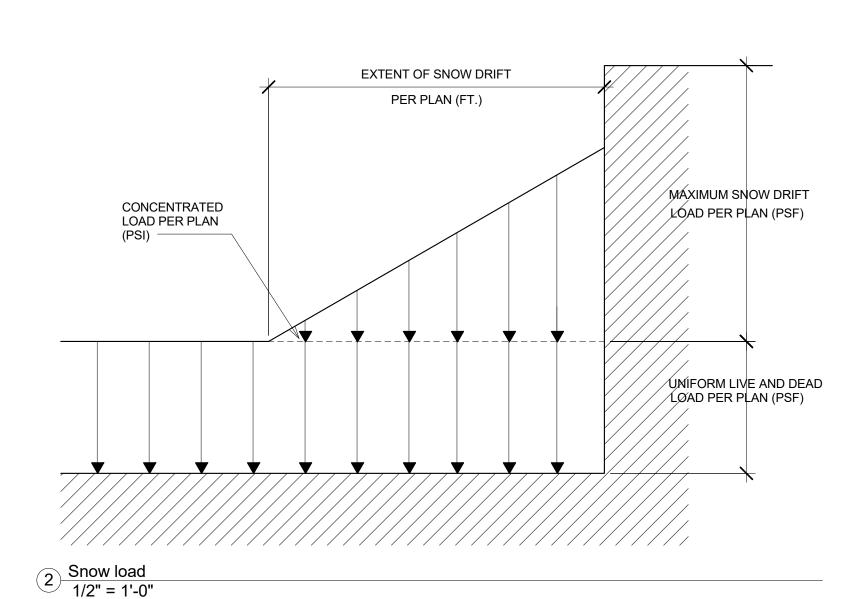
G. CONSTRUCTION

- 1. See architectural and mechanical requirements for embedded items not shown
- herein and to verify size and location of all openings. 2. Coordinate the sizes and locations of all miscellaneous metal items required for
- mechanical and electrical. Requirements for embedded items, sleeves, block outs, duct openings,etc., in the concrete frame shall be submitted (plans and details) to the structural engineer for approval at least two weeks prior to the proposed date of casting concrete. No such items, other than those shown, shall be provided in the structure without the approval of the structural engineer.
- 4. Provide adequate shoring or bracing during construction to resist forces such as wind and unbalanced loading due to construction.
- 5. Field verify the location and depth (or height) of all utilities prior to beginning construction in order to provide adequate clearances and to insure noninterruption of service.



NOTE: TRUSS PROVIDER TO ALLOW 1500# RTU AT MID SPAN.

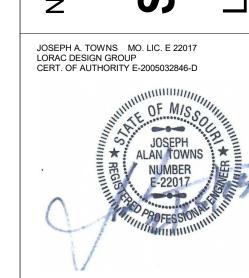
3 Snow Load Plan 1/16" = 1'-0"



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Structural Notes

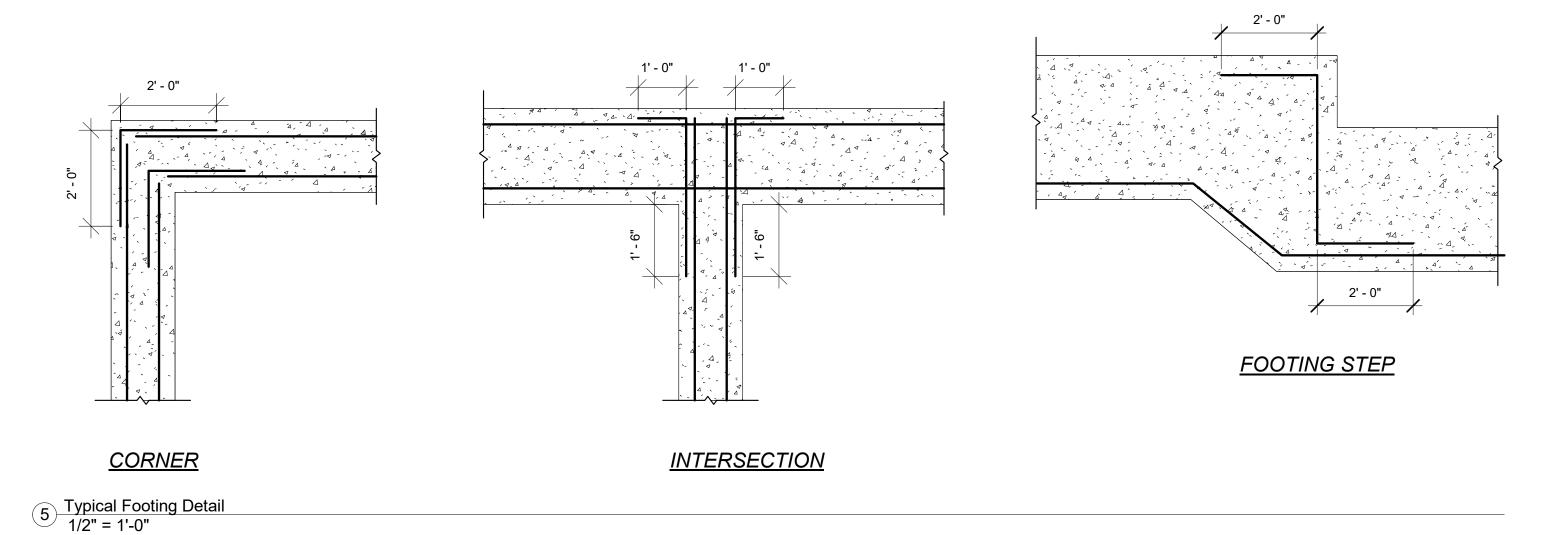
Revision Schedule

Project number

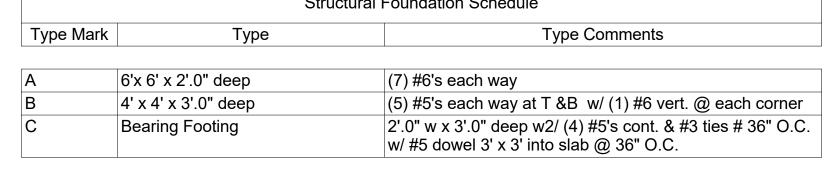
As indicated

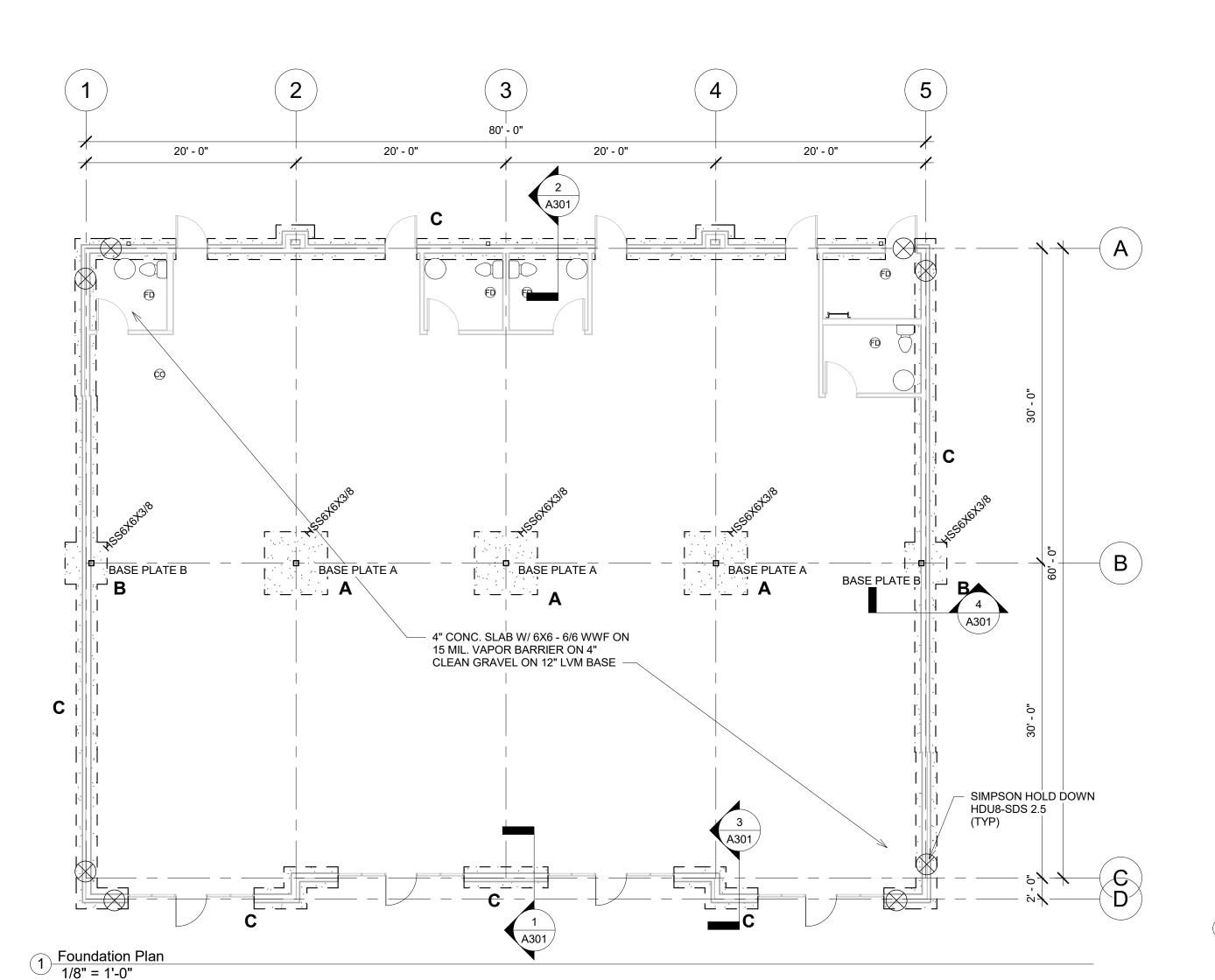
2491

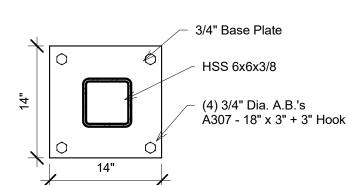
03.01.2023



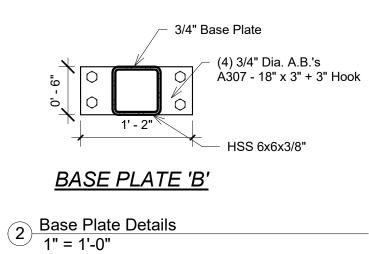
Structural Foundation Schedule Type Type Mark Type Comments (7) #6's each way 6'x 6' x 2'.0" deep (5) #5's each way at T &B w/ (1) #6 vert. @ each corner 4' x 4' x 3'.0" deep

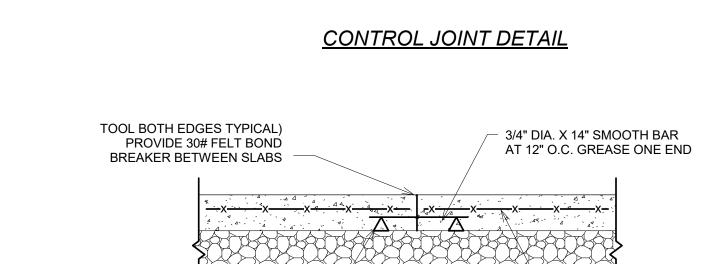






BASE PLATE 'A'





1/3 OF SLAB DEPTH — BY 1/8" WIDE - CUT WITHIN 12 HOURS

OF PLACING SLAB

SLAB REINFORCING TO BE CONTINUOUS PER PLAN

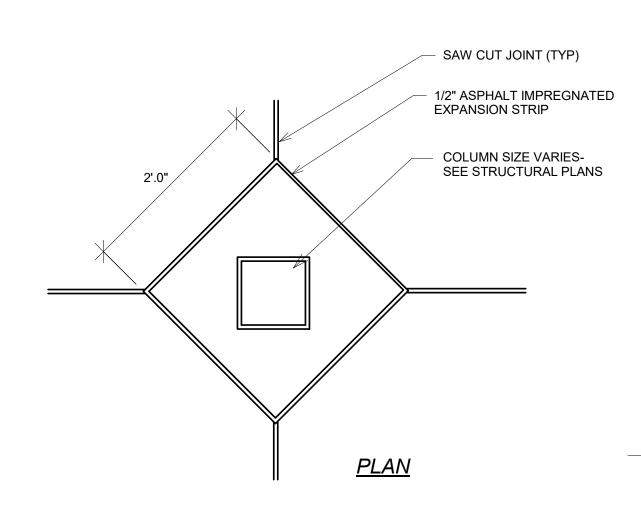
(USE IF POUR IS STOPPED)

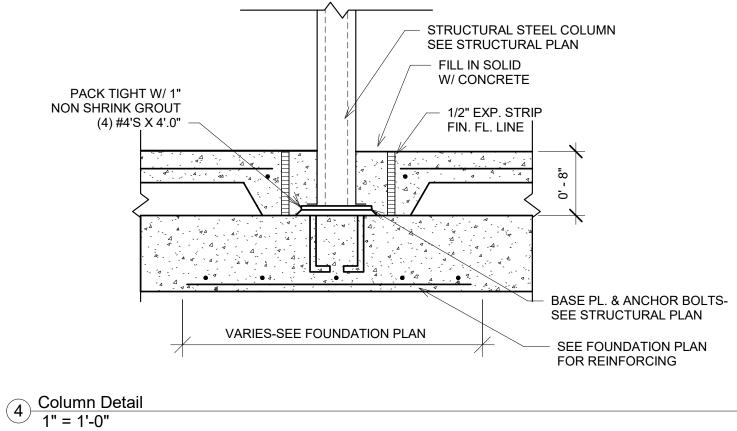
SUBGRADE PER PLAN

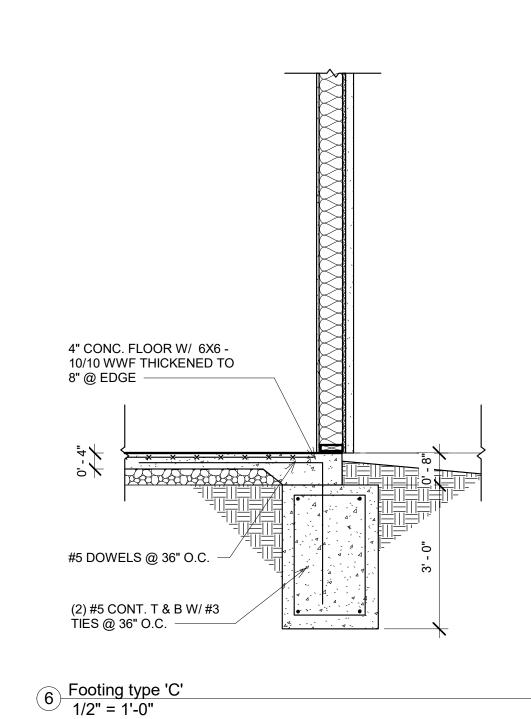
STOP REINFORCEMENT EACH SIDE OF JOINT

3 Sawcut Floor Slab
3/4" = 1'-0"

PRE FABRICATED DOWEL BASKETS-TYPICAL



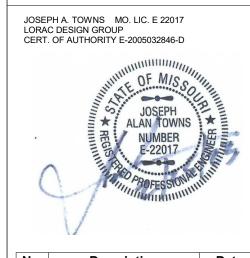






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Description **Revision Schedule**

Foundation

2491 Project number 03.01.2023

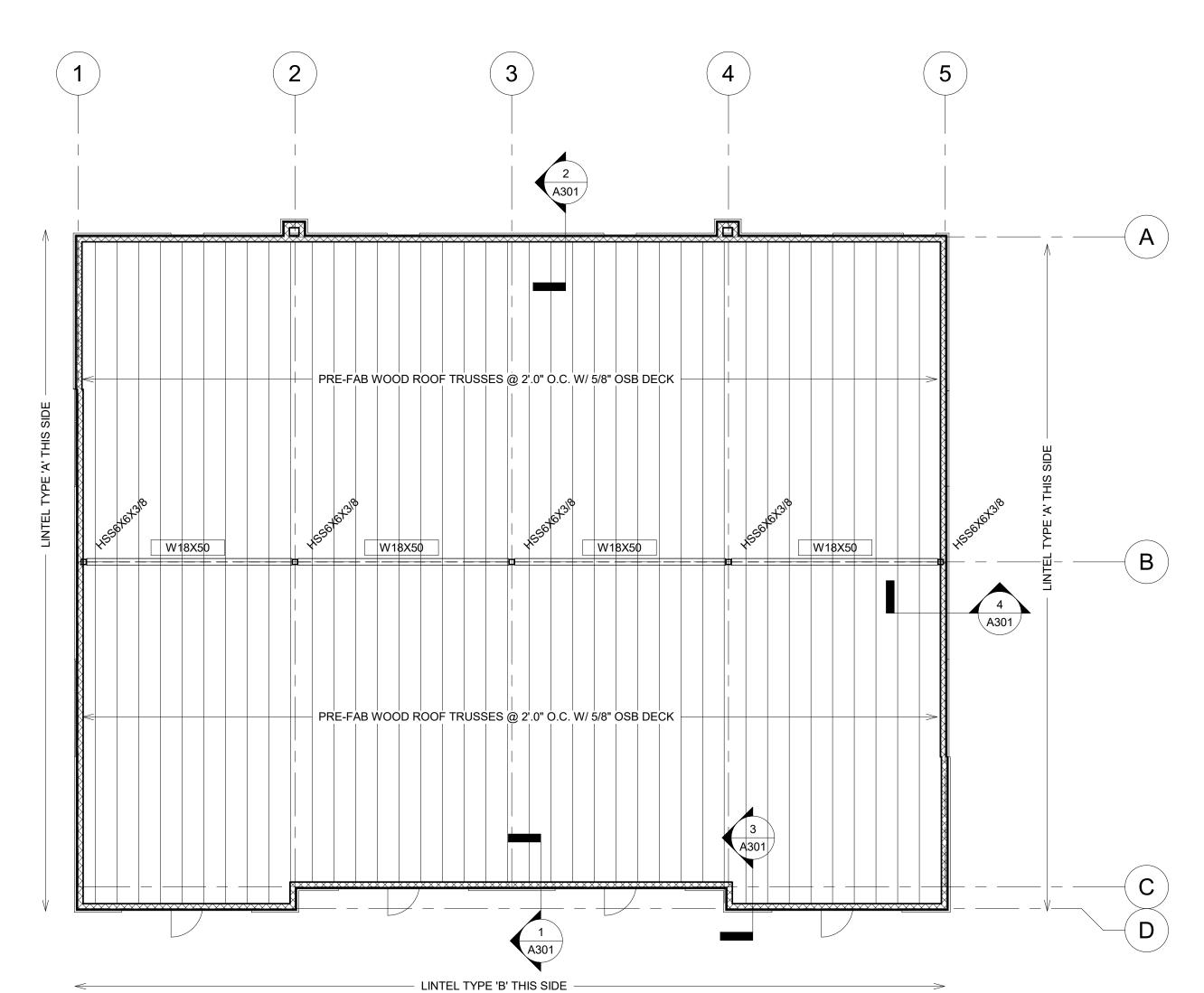
STRUCTURAL NOTES

- TRUSS MANUFACTURER TO FURNISH ALL HOLD DOWNS AND CLIPS FOR WOOD TRUSSES PROVIDE HEAVY DUTY CLIPS AT ALL PANEL EDGES PERPENDICULAR TO TRUSSES AT 2'-0" O.C. STAGGER END OF PANELS AND GAP ALL PANELS 1/16" AT ALL EDGES
- PROVIDE SIMPSON H1 HOLD DOWN CLIPS FOR EACH TRUSS ROOF SHEATHING TO BE 5/8" EXTERIOR APA PLYWOOD, NAILED WITH 10d NAILS AT 6" O.C. ALL
- AROUND PLYWOOD EDGES (BLOCKING AS REQUIRED) AND ALL AROUND ROOF PERIMETER WITH 10d NAILS AT 6" O.C. AT ALL INTERMEDIATE SUPPORTS BRACING DESIGN BY TRUSS MANUFACTURER
- TRUSS MANUFACTURER TO PROVIDE DESIGN DRAWINGS AND CALCULATIONS AND LAYOUT PLAN, SEALED BY REGISTERED ENGINEER, FOR REVIEW, AND FOR APPROVAL BY THE CITY WALL SHEATHING TO BE 5/8" OSB, NAILED WITH 8d NAILS AT 6" O.C. AT ALL STUDS AND FULL PERIMETER OF EACH PLYWOOD SHEET (BLOCKING AS REQUIRED) AND ALL AROUND
- PERIMETER OF WALL AND AROUND ALL **OPENINGS** SEE ARCHITECTURAL SHEETS FOR ALL OPENING
- HEIGHTS AND WIDTHS ALL DOOR AND WINDOW OPENINGS TO BE
- SUPPORTED BY MIN. (3) 2X12 LINTEL ABOVE OPENING, BEARING ON (2) STUDS AT EACH SIDE ALL STEEL LINTEL BEAMS TO BE SUPPORTED BY
- (4) 2X STUDS AT EACH END

LINTEL SCHEDULE

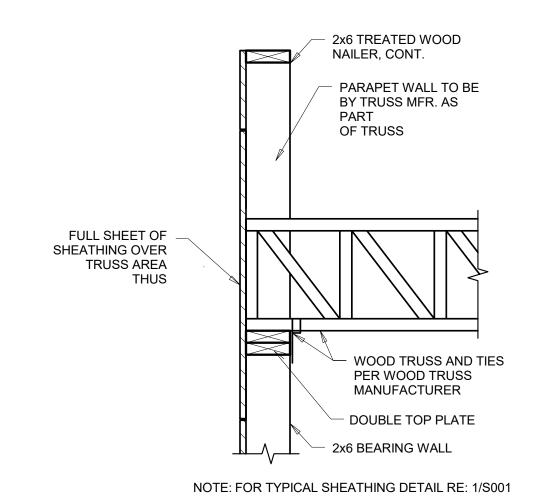
LINTEL TYPE 'A' TWO 2X12'S LINTEL TYPE 'B' THREE 2X12'S

PROVIDE (4) 2X6'S BEARING AT EACH END OF LINTELS

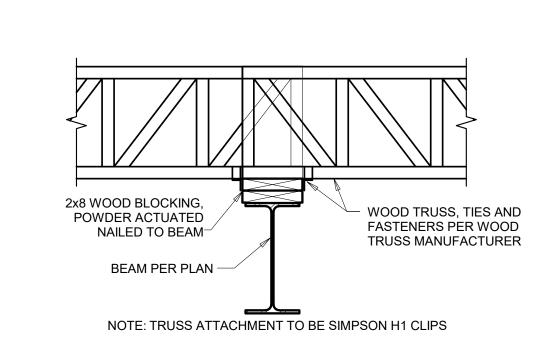


FULL SHEET OF EXTERIOR SHEATHING CENTERED OVER TRUSSES TRUSSES BEYOND, TYP. TYPICAL 4'x8' SHEET OF SHEATHING, TYP. NOTE: ALL EXTERIOR SHEATHING TO HAVE NAILS @ 4" O.C. AROUND EDGE AND 6" O.C. INFIELD.

Typical Exterior sheathing wood
1/2" = 1'-0"



3 typical section at truss bearing wood 1" = 1'-0"



2 typical section at truss bearing 2 wood 1" = 1'-0"

Brook 8: 816-

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J.Jeffry Schroeder Mo. Licence A-4226 Herman Scharhag Co., Arch. Cert. of Authority A-22

Revision Schedule

Framing

03.01.2023

1 Roof Framing Plan 1/8" = 1'-0"

Project number

As indicated